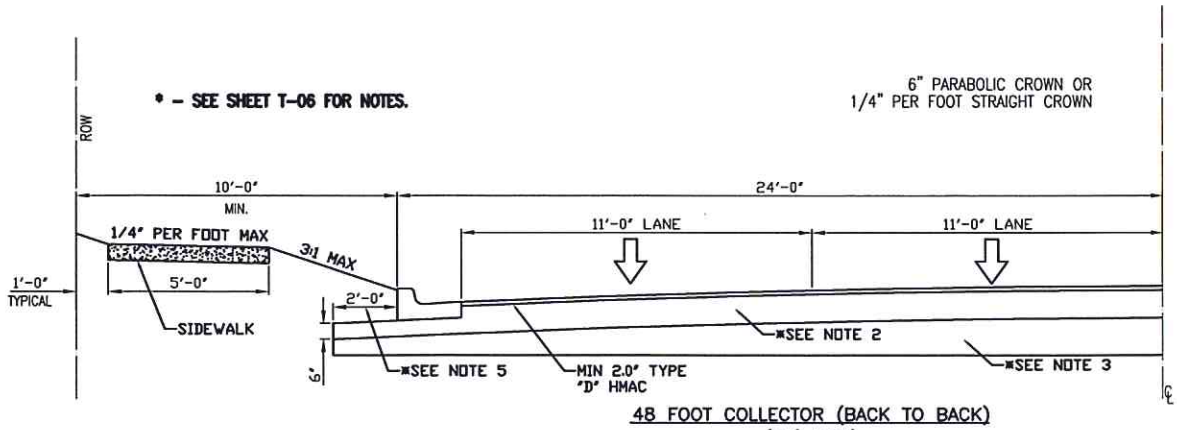
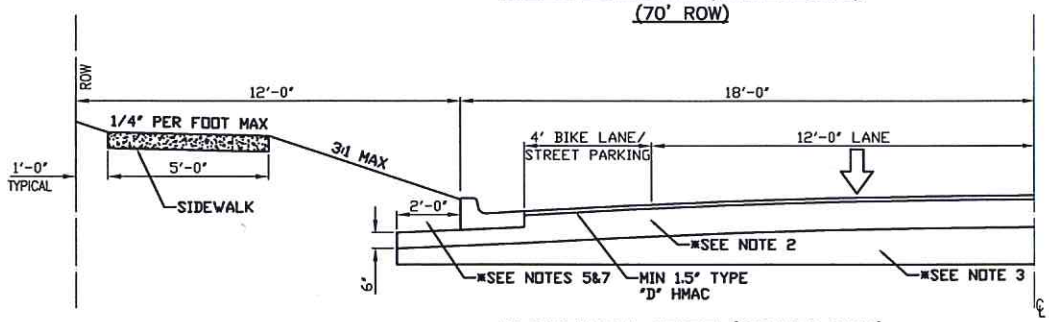
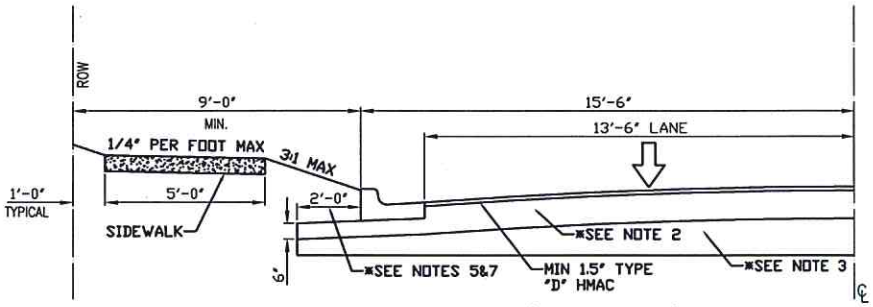


48 FOOT COLLECTOR (BACK TO BACK)
(70' ROW)



36 FOOT LOCAL STREET (BACK TO BACK)
(60' ROW)



31 FOOT LOCAL STREET (BACK TO BACK)
(50' ROW)

NOTES:

1) LANE WIDTHS ARE APPROXIMATE
2) VARIANCES ALLOWED ONLY AS APPROVED BY THE DEPARTMENT OF PUBLIC WORKS

0 3 6

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

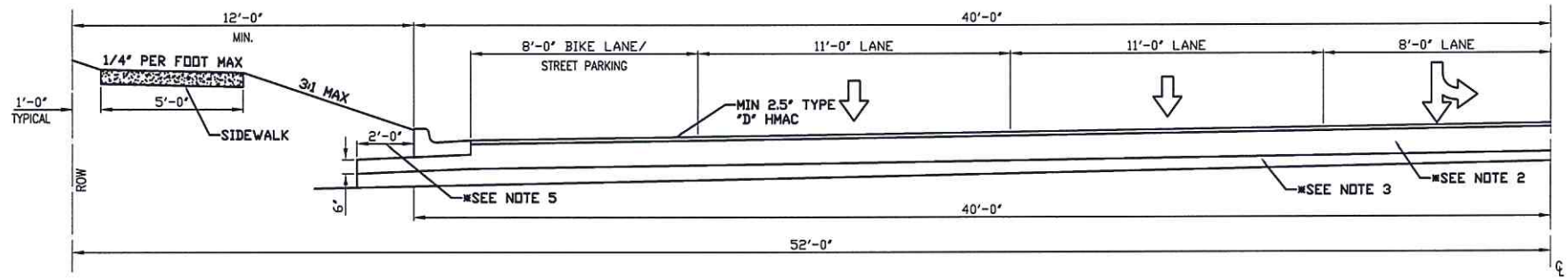
TYPICAL HALF CROSS SECTIONS FOR LOCAL/COLLECTOR STREETS

CONSTRUCTION STANDARDS AND DETAILS

T-01
SCALE: N.T.S.
ISSUE DATE: 03-12-13

* – SEE SHEET T-06 FOR NOTES.

6" PARABOLIC CROWN OR
1/4" PER FOOT STRAIGHT CROWN



80 FOOT ARTERIAL (BACK TO BACK)
(110' ROW)

NOTES:
1) LANE WIDTHS ARE APPROXIMATE
2) VARIANCES ALLOWED ONLY AS APPROVED BY THE DEPARTMENT OF PUBLIC WORKS

0 3 6

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS
CONSTRUCTION STANDARDS AND DETAILS

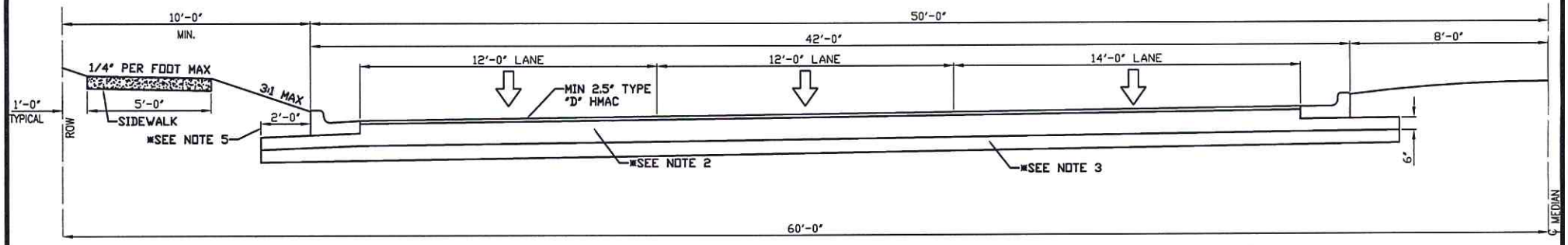
TYPICAL HALF CROSS SECTIONS
FOR ARTERIAL STREETS

ISSUE DATE: 03-12-13
SCALE : N.T.S.

T-02

* – SEE SHEET T-06 FOR NOTES.

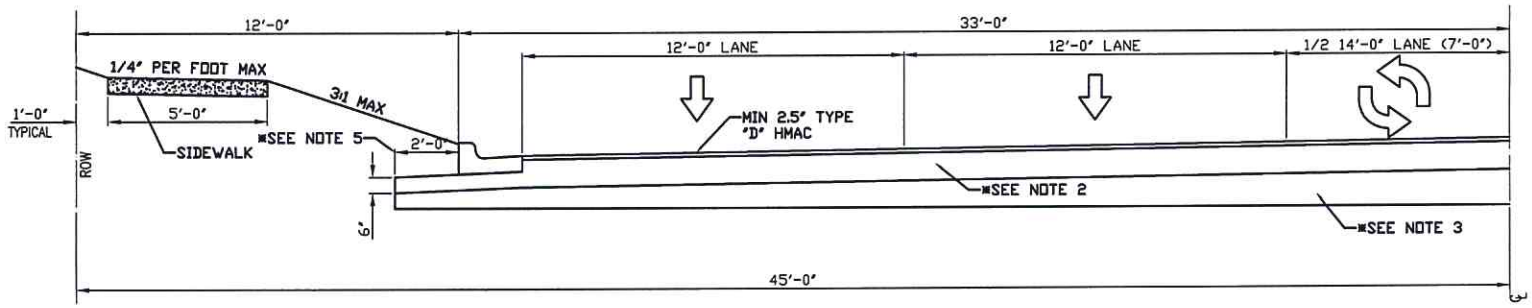
6" PARABOLIC CROWN OR
1/4" PER FOOT STRAIGHT CROWN



NOTES:

1. SUBJECT TO PUBLIC AND PRIVATE PARTICIPATION
2. MEDIAN MAY BE WIDENED FOR 4-LANE ALTERNATIVE WITH OPTION FOR FUTURE EXPANSION TO 6-LANES.

100 FOOT ARTERIAL (BACK TO BACK)
(120' ROW)



66 FOOT ARTERIAL (BACK TO BACK)
(90' ROW)

NOTES:

1) LANE WIDTHS ARE APPROXIMATE
2) VARIANCES ALLOWED ONLY AS APPROVED BY THE DEPARTMENT OF PUBLIC WORKS

0 3 6

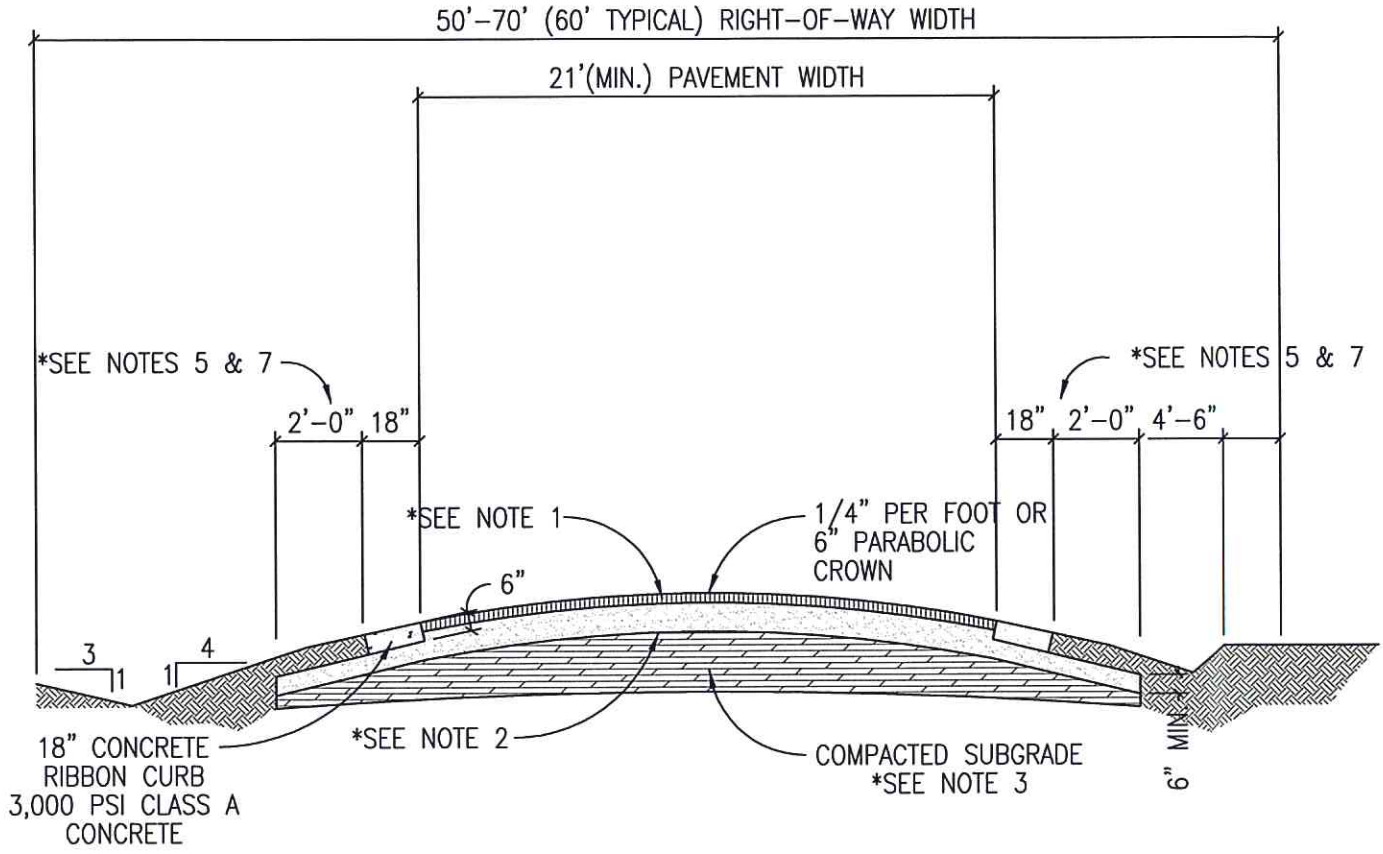
CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS
CONSTRUCTION STANDARDS AND DETAILS

TYPICAL HALF CROSS SECTIONS FOR ARTERIAL STREETS

ISSUE DATE: 03-12-13
SCALE : N.T.S.

T-03

* – SEE SHEET T-06 FOR NOTES.



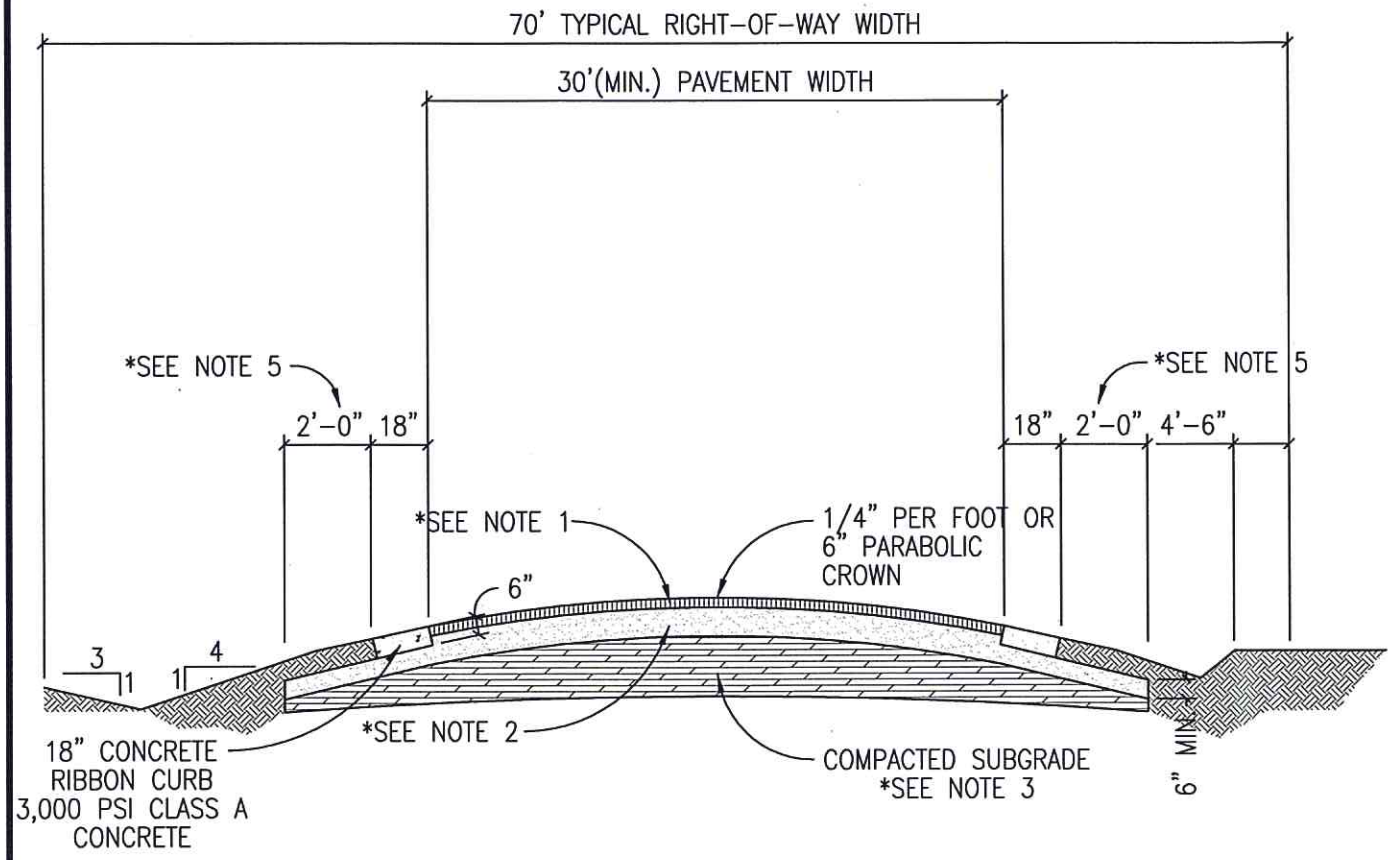
CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

TYPICAL RURAL PAVING STANDARD

CONSTRUCTION STANDARDS AND DETAILS

T-04
SCALE: N.T.S.
ISSUE DATE: 03-12-13

* – SEE SHEET T-06 FOR NOTES.



NOTE : ADDITIONAL RIGHT-OF-WAY WIDTH MAY BE REQUESTED BY THE CITY AS NECESSARY TO COMPLY WITH THE CITY OF KILLEEN THOROUGHFARE PLAN.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

TYPICAL RURAL (COLLECTOR) PAVING STANDARD

CONSTRUCTION STANDARDS AND DETAILS

T-05
SCALE: N.T.S.
ISSUE DATE: 03-12-13

NOTES:

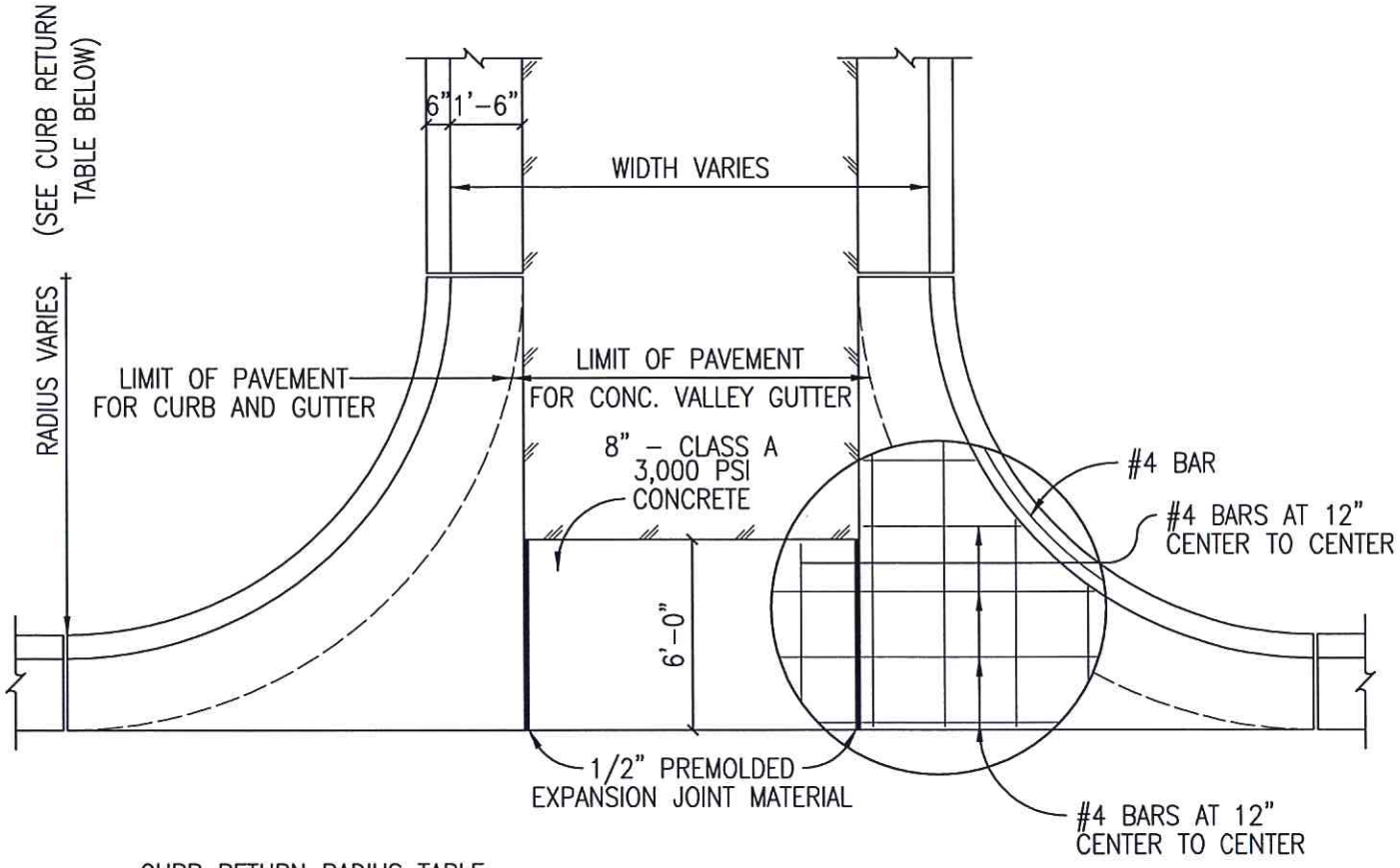
1. MIN 1.5" TYPE 'D' HOT MIX ASPHALTIC CONCRETE.
2. FLEXBASE, TXDOT ITEM 247, GRADE 2 OR BETTER, SHALL BE PLACED IN LIFTS NOT EXCEEDING 6" COMPACTED DEPTH AND TO A MINIMUM 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D1557 (METHOD D). THE BASE MATERIAL SHALL BE PLACED AT OPTIMUM MOISTURE ± 2%.
3. LIME STABILIZATION OR GEOGRID MAY BE USED TO REDUCE BASE MATERIAL THICKNESS WHEN PRESCRIBED BY A QUALIFIED GEOTECHNICAL REPORT IN LIEU OF THE MINIMUM BASE MATERIAL THICKNESS LISTED BELOW:
4. COMBINED THICKNESS OF FLEXIBLE BASE COURSE, TREATED SUBGRADE OR SUBBASE SHALL BE AS REQUIRED TO SUPPORT TRAFFIC LOADS AND VOLUME ON SUBGRADE.
5. SUBGRADE/BASE SHALL BE EXTENDED 2'–0" BEHIND CURB FOR ALL STREET SECTIONS.
6. SUBGRADE SHALL BE AT OPTIMUM MOISTURE OR ABOVE PRIOR TO PLACING BASE MATERIAL.
7. NO BASE MATERIAL REQUIRED UNDER CURB FOR LOCAL STREETS WITH GROUP I OR II SUBGRADE CLASSIFICATIONS.

SUBGRADE CLASSIFICATION GROUPS

GROUP NO.	LIQUID LIMIT	PLASTICITY INDEX	TYPICAL MATERIAL DESCRIPTION
I	<35	5-15	limestone, weathered limestone, or severely weathered limestone
II	30-40	10-25	sandy clays, silty clays, or severely weathered limestone
III	40-50	15-30	sandy clays, silty clays, or severely weathered limestone
IV	50-60	20-35	clays or silty clay
V	60-70	25-40	clay
VI	70-80	35-50	clay
VII	<80	40-60	clay

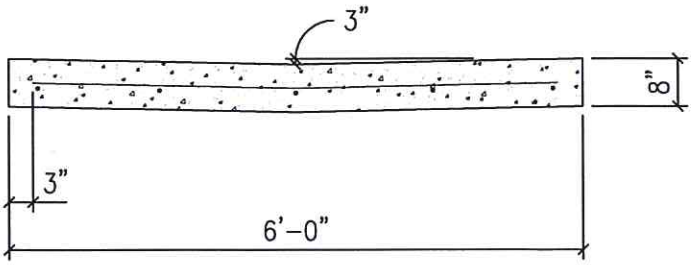
PAVING SECTIONS

STREET TYPE	MIN. HMAC TYPE 'D'	MIN. SECTION THICKNESS BY SOIL GROUP CLASSIFICATION						
		GROUP I	GROUP II	GROUP III	GROUP IV	GROUP V	GROUP VI	GROUP VII
LOCAL STREET	1.5"	7.5"[7]	8.5"[7]	10"	12.0"	14.0"	16.0"	18.0"
COLLECTOR	2.0"	8.0"	9.0"	11.0"	14.0"	16.0"	18.0"	22.0"
MARGINAL ACCESS STREET	2.0"	8.0"	10.0"	12.5"	15.0"	17.5"	20.0"	24.0"
ARTERIAL	2.5"	8.5"	11.0"	13.5"	16.5"	19.0"	21.5"	26.0"
RURAL LOCAL	1.5"	7.5"	8.5"	9.5"	12.0"	14.0"	16.0"	18.0"
RURAL COLLECTOR	2.0"	8.0"	9.0"	11.0"	14.0"	16.0"	18.0"	22.0"



CURB RETURN RADIUS TABLE

CATEGORY	RADIUS (FT)
ARTERIAL	25
COLLECTOR	25
LOCAL STREET	15

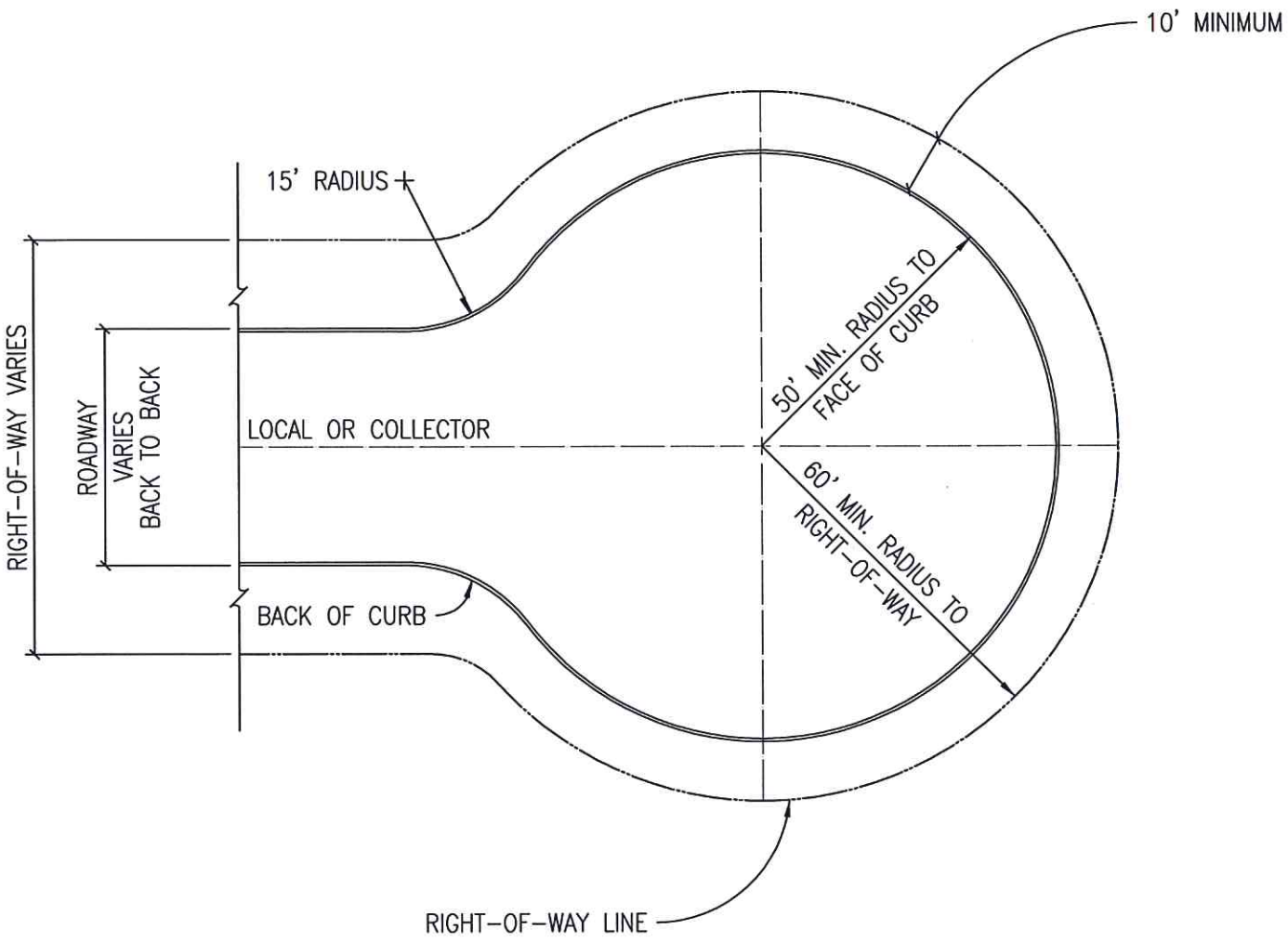


CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

CONCRETE VALLEY GUTTER STANDARD

CONSTRUCTION STANDARDS AND DETAILS

T-07
SCALE: N.T.S.
ISSUE DATE: 03-12-13



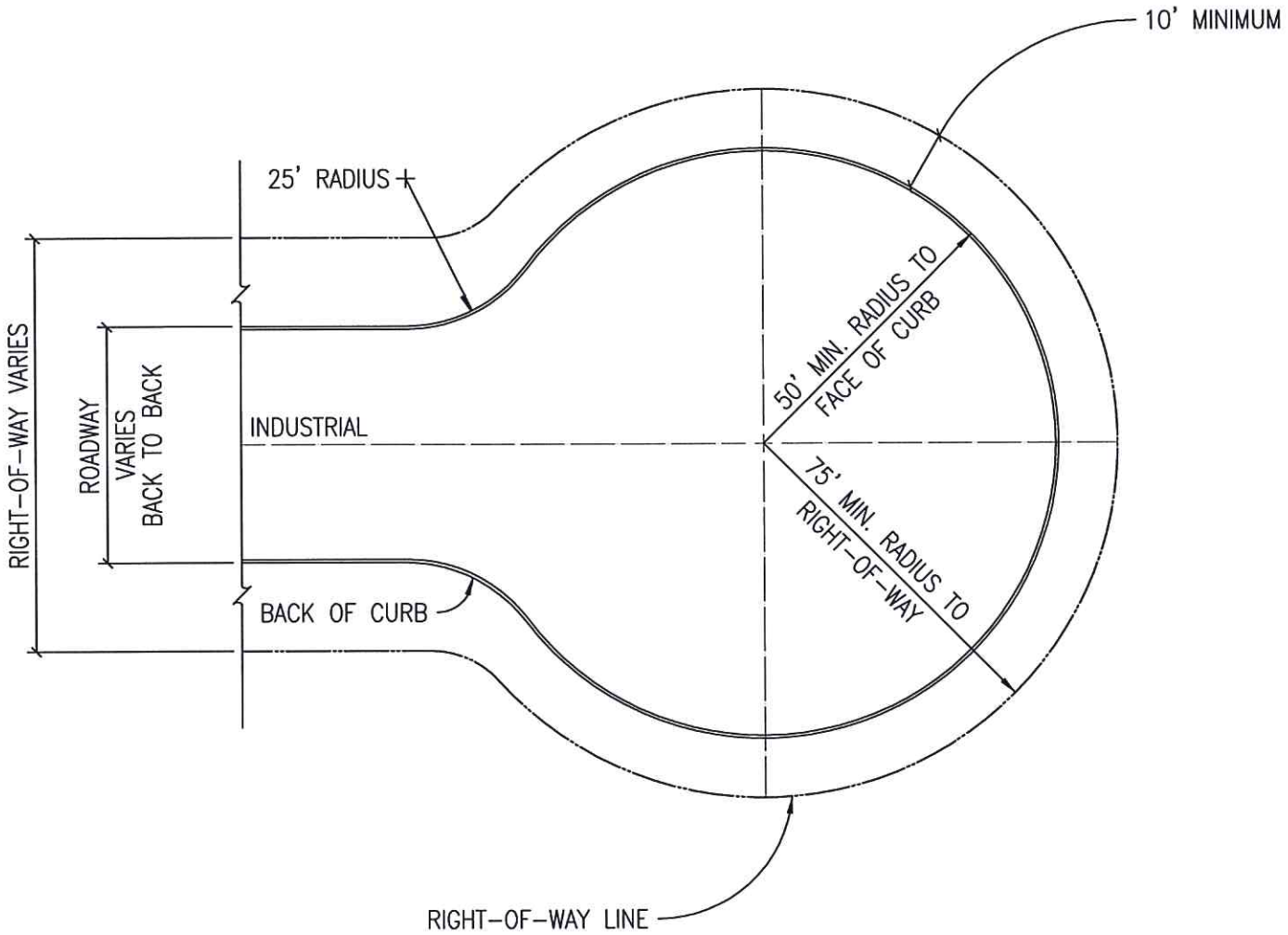
NOTE:
1. CUL-DE-SAC SHALL BE CONSTRUCTED WITH A 7-INCH CROWN, GIVING A 1.5% CROSS SLOPE.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

LOCAL/MINOR COLLECTOR CUL-DE-SAC PLAN

CONSTRUCTION STANDARDS AND DETAILS

T-08
SCALE: N.T.S.
ISSUE DATE: 03-12-13



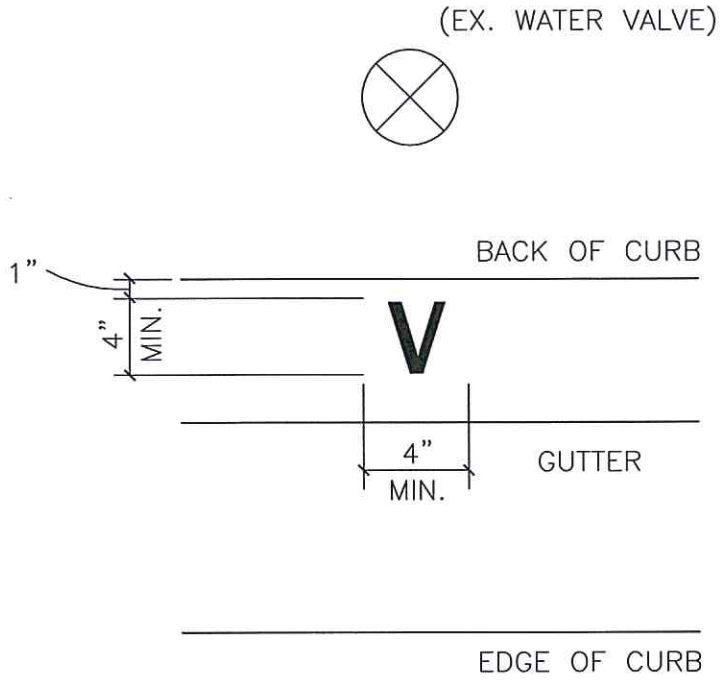
NOTE:
1. CUL-DE-SAC SHALL BE CONSTRUCTED WITH A MIN. 9-INCH CROWN, GIVING A 1.5% CROSS SLOPE.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

MARGINAL ACCESS CUL-DE-SAC PLAN

CONSTRUCTION STANDARDS AND DETAILS

T-09
SCALE: N.T.S.
ISSUE DATE: 03-12-13



PLAN VIEW
(TYPICAL)

NOTES:

1. ALL WATER SERVICE, WASTE WATER SERVICE AND VALVE LOCATIONS SHALL BE APPROXIMATELY MARKED AS FOLLOWS:

WATER SERVICE	"W"	FACE OF CURB
WASTE WATER SERVICE	"S"	FACE OF CURB
VALVE	"V"	FACE OF CURB

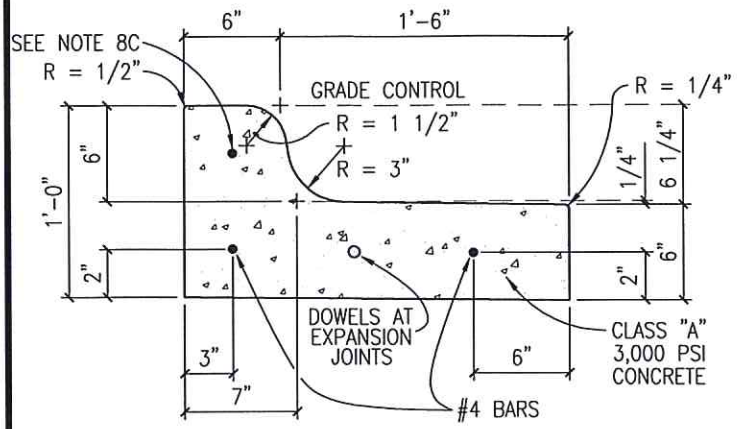
2. LETTERS SHALL HAVE A 1/2" MAX. STROKE WIDTH.
3. LETTER SHALL BE ETCHED, NOT PAINTED.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

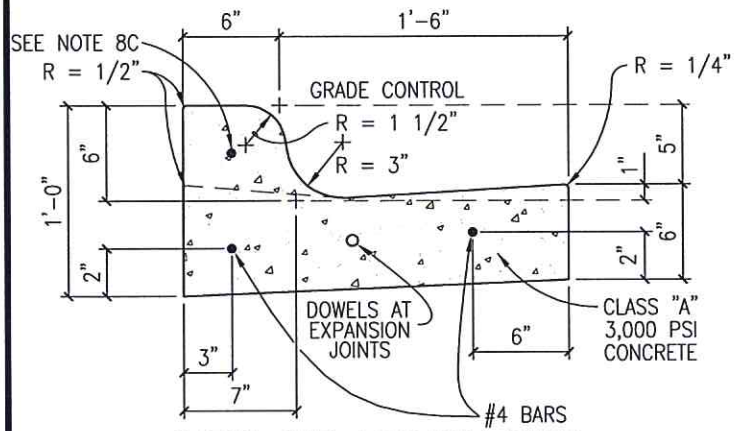
CURB STAMP STANDARD

CONSTRUCTION STANDARDS AND DETAILS

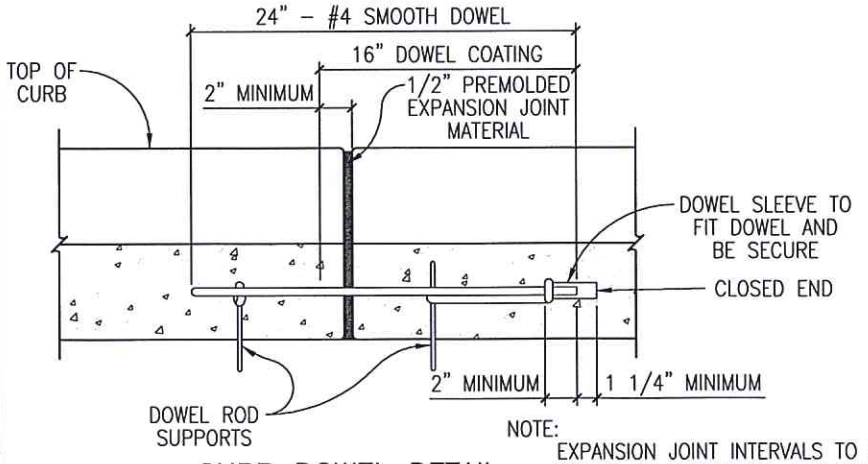
T-10
SCALE: N.T.S.
ISSUE DATE: 03-12-13



SPILL CURB



CATCH AND LAYDOWN CURB



CURB DOWEL DETAIL

NOTE:
EXPANSION JOINT INTERVALS TO BE PLACED AT CURB INLETS, POINTS OF CURVATURE, AND SIDEWALK EXPANSION JOINTS.

NOTES:

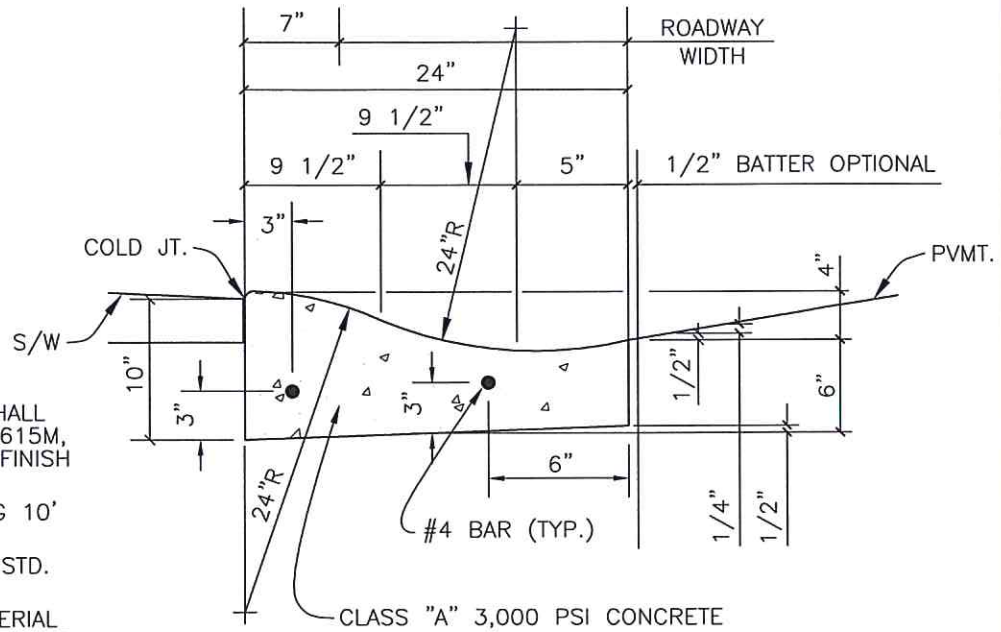
1. ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C309, AND D1752. BROOM FINISH EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.
4. 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
5. TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR THE CITY OF KILLEEN.
6. ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
7. ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
8. ONE OF THE FOLLOWING SCHEMES OF REINFORCEMENT SHALL BE REQUIRED. THE MANNER OF PLACEMENT AND LOCATION SHALL BE TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF KILLEEN.
   A. CURB AND GUTTER (REINFORCED) SHALL HAVE LONGITUDINAL REINFORCING BARS AS FOLLOWS: TWO #4,
   B. MANUALLY FORMED CURB (REINFORCED) SHALL HAVE #4 BAR FOR LONGITUDINAL REINFORCEMENT.
   C. FOR MANUALLY FORMED AND POURED CURB, A THIRD #4 BAR SHALL BE PLACED 3" FROM TOP OF CURB.
   D. STEEL REINFORCEMENT IS OPTIONAL FOR MACHINE LAID CURB.
9. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.
10. TRANSVERSE SLOPE OF GUTTER SHALL CONFORM TO ADA REQUIREMENTS AT ALL PEDESTRIAN CROSSINGS.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

CURB AND GUTTER STANDARD

CONSTRUCTION STANDARDS AND DETAILS

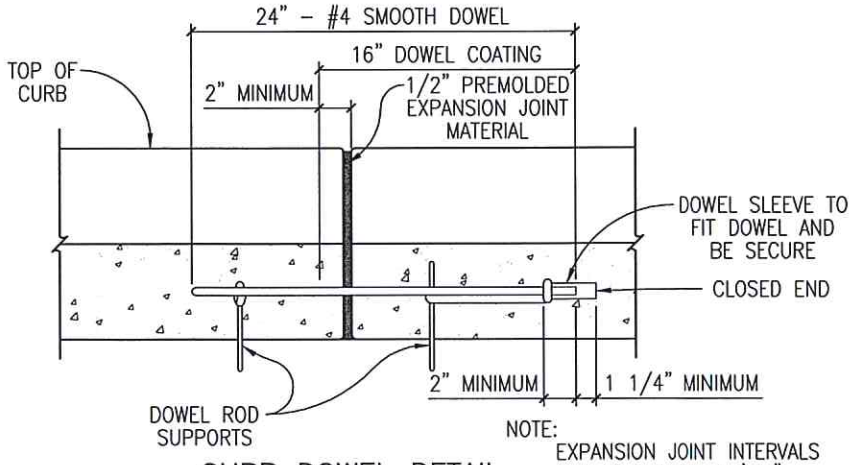
T-11
SCALE: N.T.S.
ISSUE DATE: 03-12-13



MOUNTABLE CURB

NOTES:

1. ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C309, AND D1752. BROOM FINISH EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.
4. 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
5. TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR THE CITY OF KILLEEN.
6. ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
7. ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
8. ONE OF THE FOLLOWING SCHEMES OF REINFORCEMENT SHALL BE REQUIRED. THE MANNER OF PLACEMENT AND LOCATION SHALL BE TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF KILLEEN.
   A. CURB AND GUTTER (REINFORCED) SHALL HAVE LONGITUDINAL REINFORCING BARS AS FOLLOWS: TWO #4,
   B. ALL TYPES OF CURB (REINFORCED) SHALL HAVE #4 BAR FOR LONGITUDINAL REINFORCEMENT.
9. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.



CURB DOWEL DETAIL

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

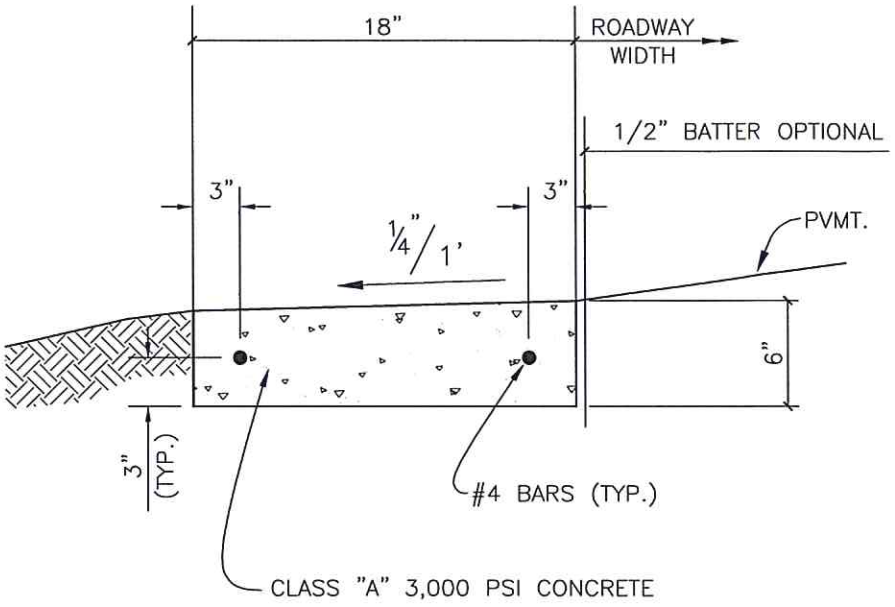
MOUNTABLE CURB AND GUTTER STANDARDS

CONSTRUCTION STANDARDS AND DETAILS

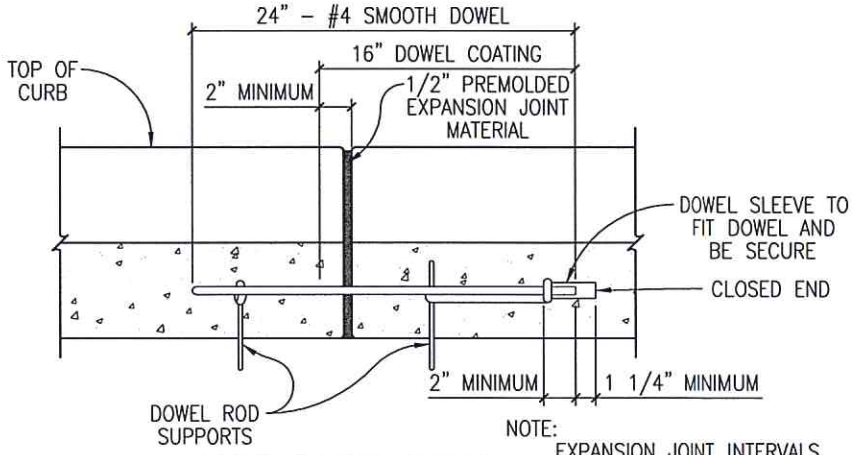
T-12
SCALE: N.T.S.
ISSUE DATE: 03-12-13

NOTES:

1. ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C309, AND D1752. BROOM FINISH EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.
4. 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
5. TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR THE CITY OF KILLEEN.
6. ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
7. ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
8. ONE OF THE FOLLOWING SCHEMES OF REINFORCEMENT SHALL BE REQUIRED. THE MANNER OF PLACEMENT AND LOCATION SHALL BE TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF KILLEEN.
   A. CURB AND GUTTER (REINFORCED) SHALL HAVE LONGITUDINAL REINFORCING BARS AS FOLLOWS: TWO #4,
   B. ALL TYPES OF CURB (REINFORCED) SHALL HAVE #4 BAR FOR LONGITUDINAL REINFORCEMENT.
9. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.



RIBBON CURB



CURB DOWEL DETAIL

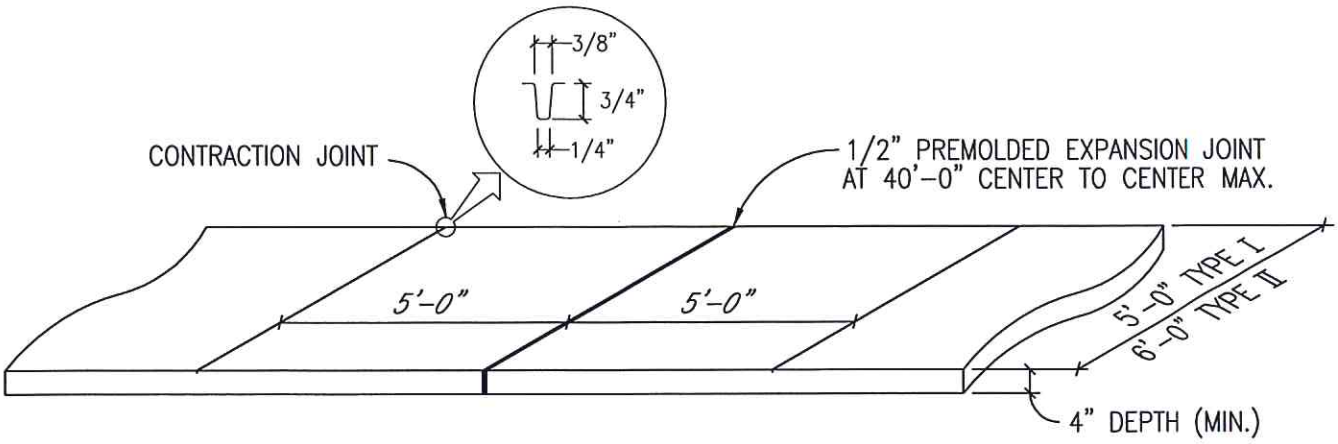
NOTE: EXPANSION JOINT INTERVALS NOT TO EXCEED 40'-0".

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

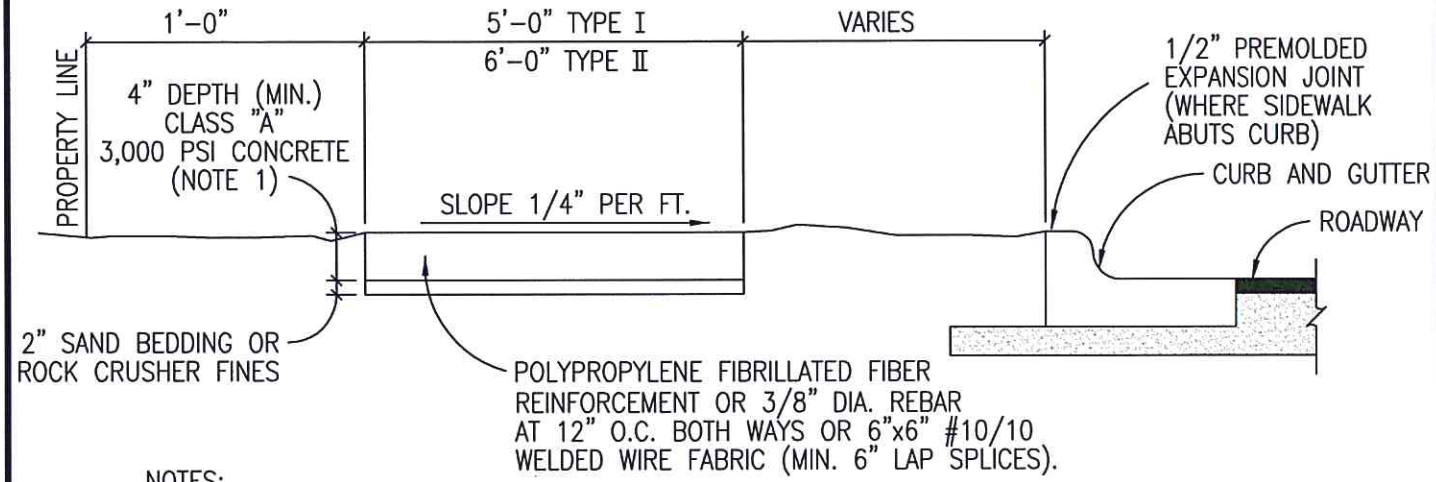
RIBBON CURB STANDARD

CONSTRUCTION STANDARDS AND DETAILS

T-13
SCALE: N.T.S.
ISSUE DATE: 03-12-13



TYPE I – FOR USE WHEN SIDEWALK IS PLACED 2' OR MORE FROM THE BACK OF CURB.
TYPE II – FOR USE WHEN SIDEWALK IS PLACED ADJACENT TO THE BACK OF CURB.



NOTES:

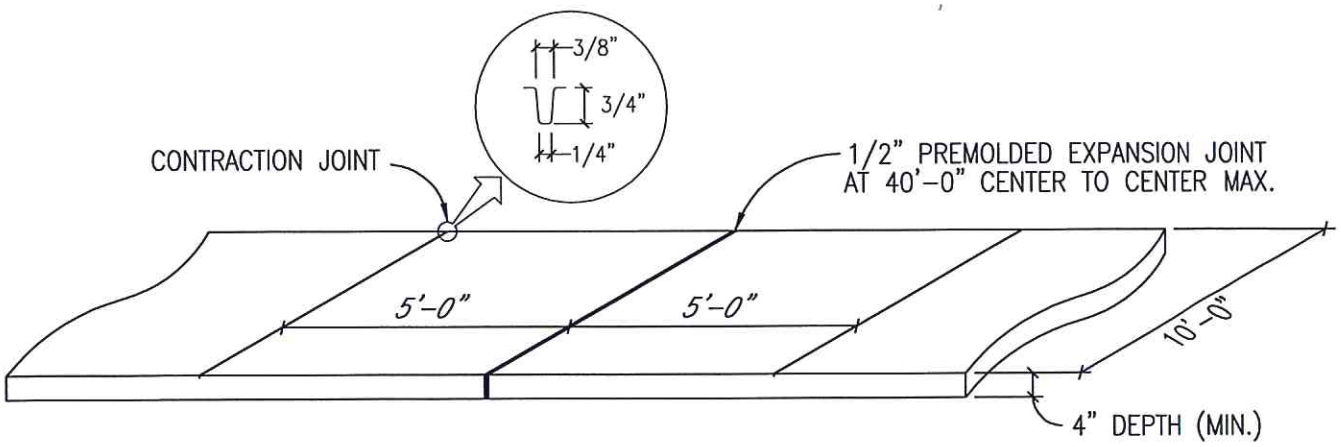
1. FOR ROLLER STAMPED SIDEWALK: MATCH TO SPECIFICATIONS.
2. STANDARD LOCATION OF SIDEWALK IS OFF BACK OF CURB. SPECIAL DESIGNS MAY BE APPROVED BY THE CITY ENGINEER, PRIOR TO FINAL DESIGN.
3. SIDEWALK SHALL CONFORM TO CURRENT AMERICANS WITH DISABILITIES ACT STANDARDS.
4. FOR PROJECTS IN WHICH PEDESTRIAN COMPONENTS (SIDEWALKS, HANDICAP RAMPS, ETC.) TOTAL CONSTRUCTION COST $50,000 OR MORE, CONSTRUCTION PLANS SHALL BE SUBMITTED AND APPROVED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION BY THE ENGINEER OF RECORD.
5. ANY VARIANCE IN TEXTURE, GRADE OR ALIGNMENT MUST BE APPROVED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION.
6. ALL CONCRETE SURFACES SHALL RECEIVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE IN THE PLANS.

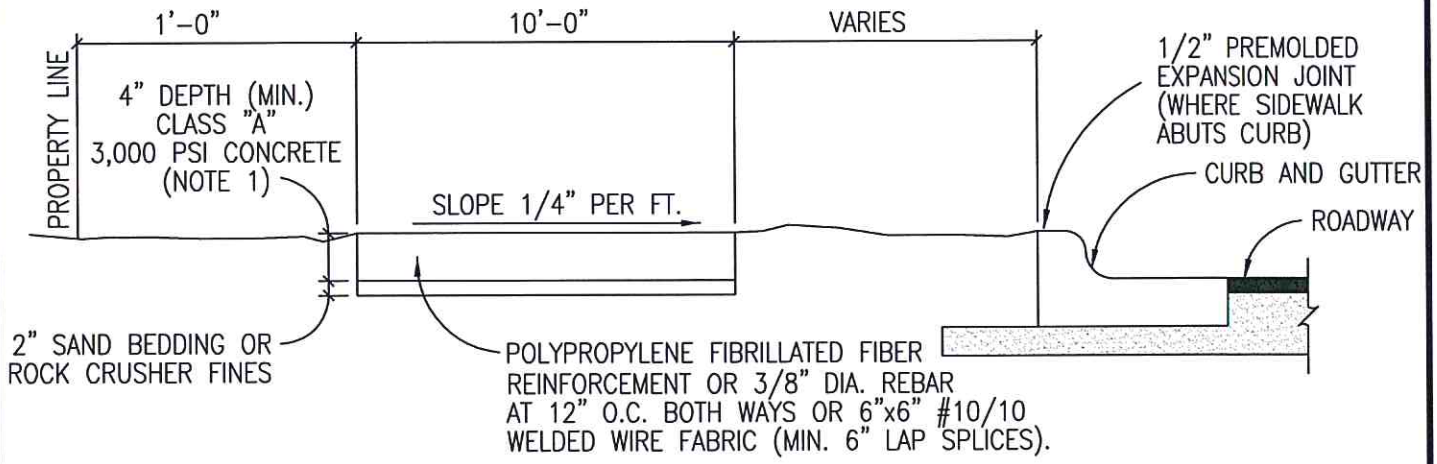
CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

SIDEWALK SECTION
STANDARD

CONSTRUCTION STANDARDS AND DETAILS

T-14
SCALE: N.T.S.
ISSUE DATE: 03-12-13





NOTES:

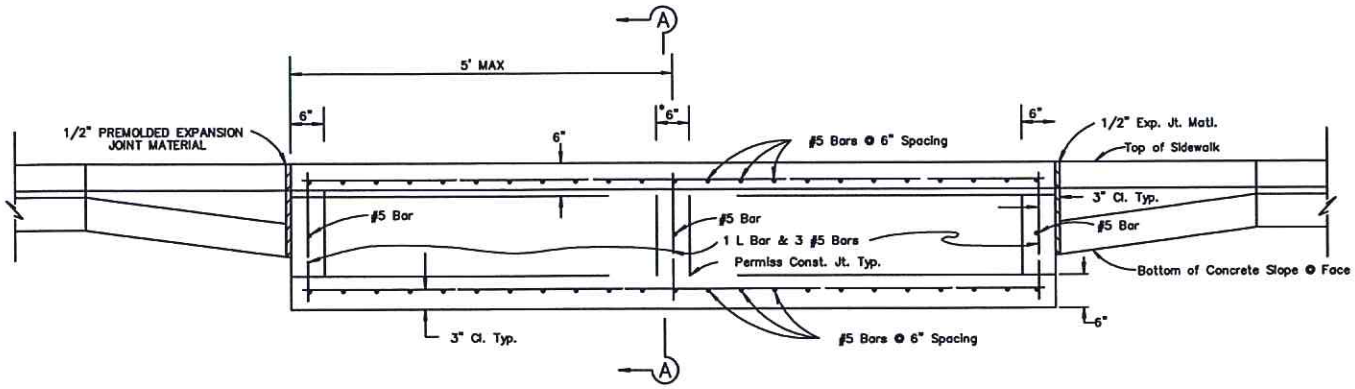
1. FOR ROLLER STAMPED HIKE AND BIKE: MATCH TO SPECIFICATIONS.
2. STANDARD LOCATION OF HIKE AND BIKE IS OFF BACK OF CURB. SPECIAL DESIGNS MAY BE APPROVED BY THE CITY ENGINEER, PRIOR TO FINAL DESIGN.
3. HIKE AND BIKE SHALL CONFORM TO CURRENT AMERICANS WITH DISABILITIES ACT STANDARDS.
4. FOR PROJECTS IN WHICH PEDESTRIAN COMPONENTS (SIDEWALKS, HANDICAP RAMPS, ETC.) TOTAL CONSTRUCTION COST $50,000 OR MORE, CONSTRUCTION PLANS SHALL BE SUBMITTED AND APPROVED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION BY THE ENGINEER OF RECORD.
5. ANY VARIANCE IN TEXTURE, GRADE OR ALIGNMENT MUST BE APPROVED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION.
6. ALL CONCRETE SURFACES SHALL RECEIVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE IN THE PLANS.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

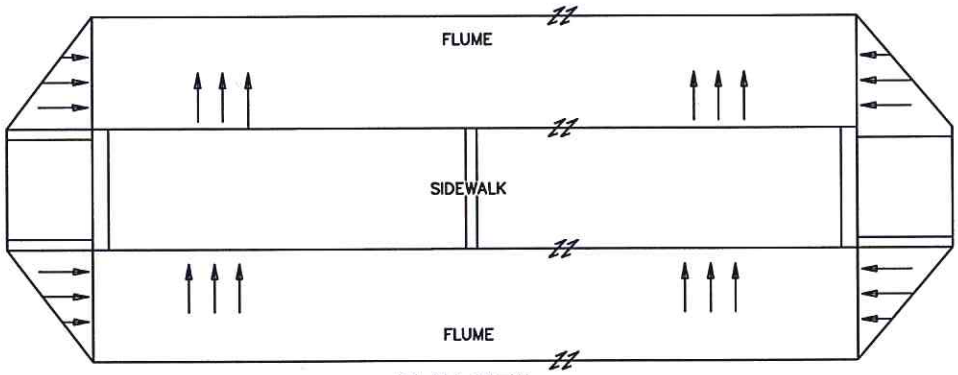
HIKE AND BIKE
SECTION DETAIL

CONSTRUCTION STANDARDS AND DETAILS

T-15
SCALE: N.T.S.
ISSUE DATE: 03-12-13



SECTION A–A



PLAN VIEW

NOTE:

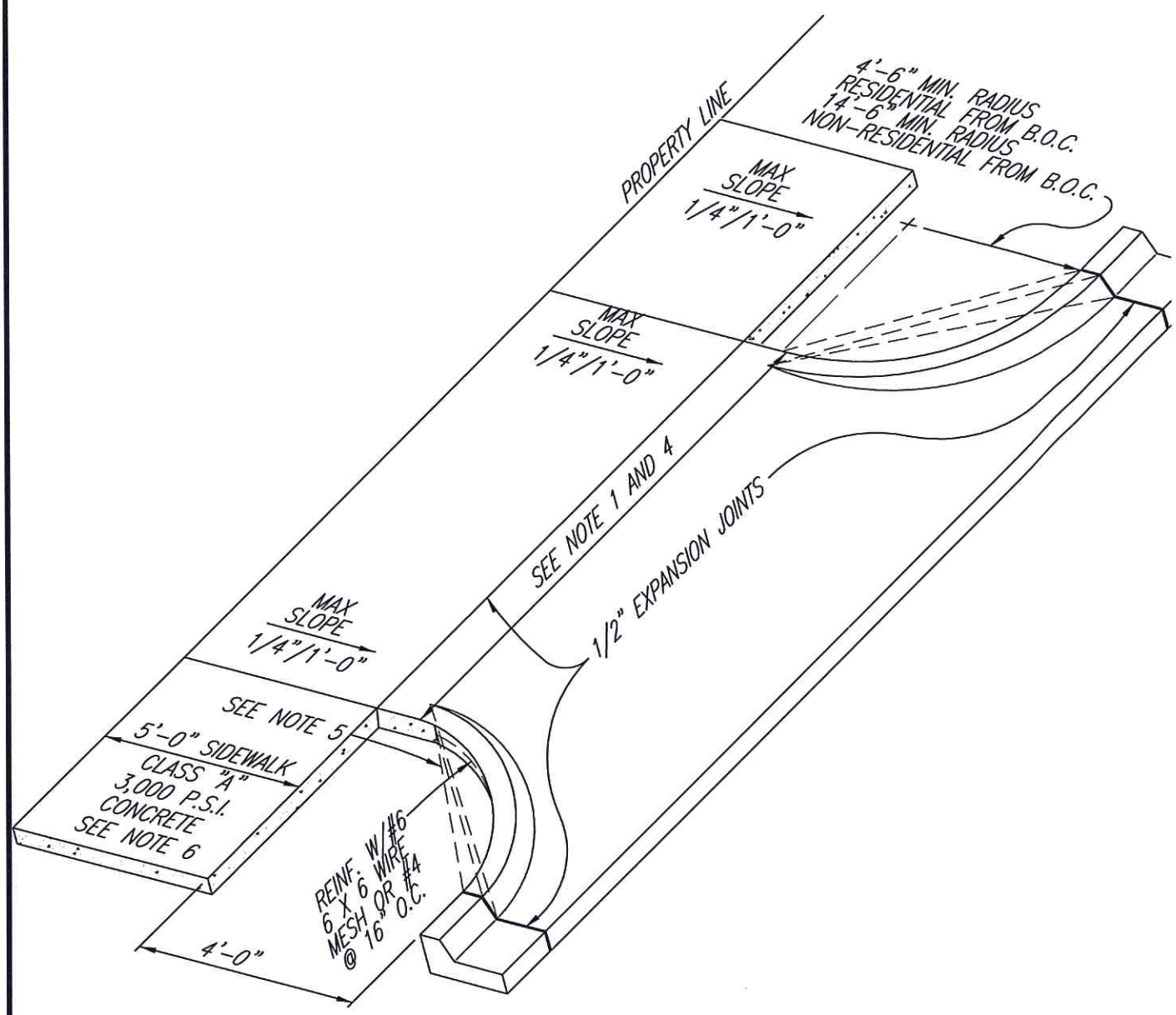
1. CONCRETE SHALL BE CLASS "A" 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. REINFORCEMENT STEEL SHALL CONFORM TO ASTM A 615, GRADE 60.
3. ALL CONCRETE SURFACES SHALL RECEIVE A LIGHT BROOM FINISH UNLESS OTHERWISE SPECIFIED IN THE PLANS.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

FREESPAN SIDEWALK SECTIONS

CONSTRUCTION STANDARDS AND DETAILS

T–16
SCALE: N.T.S.
ISSUE DATE: 03–12–13



NOTES:

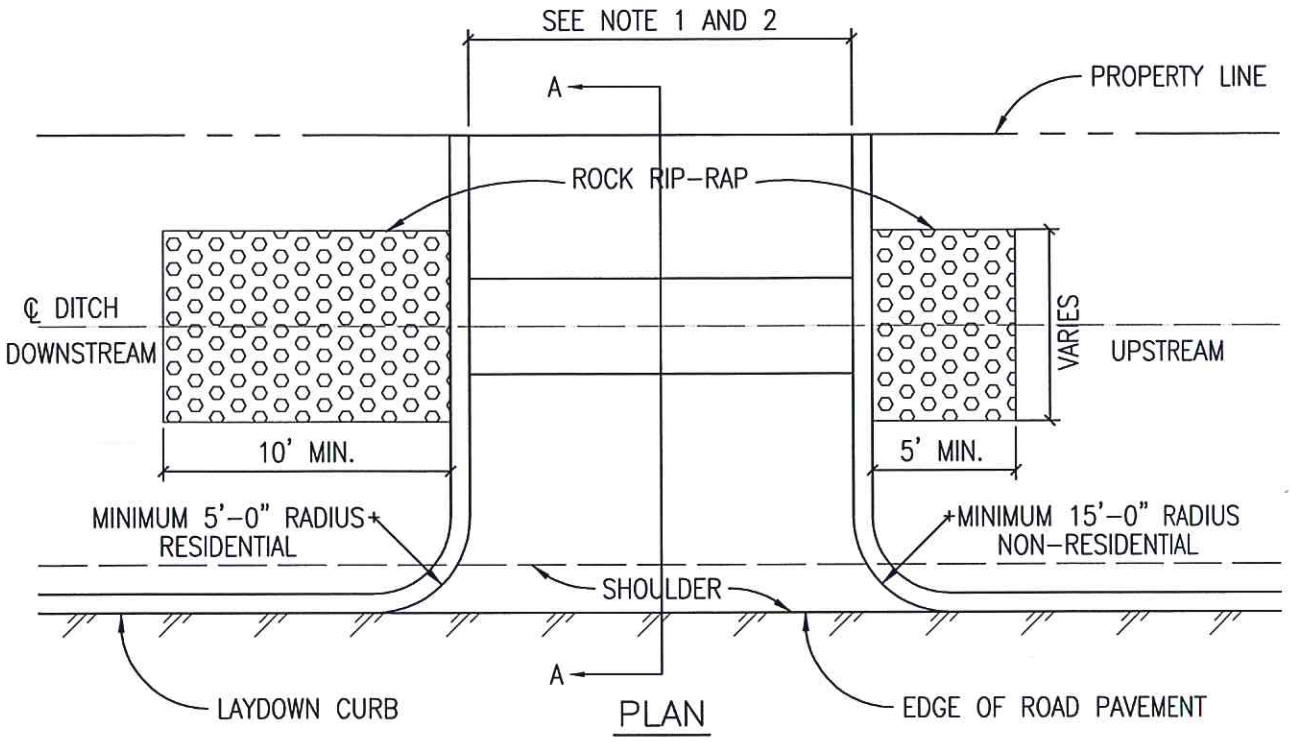
1. DRIVEWAY PERMITS TO BE ACQUIRED FROM CITY HALL.
2. SPACING OF DRIVEWAY CUTS SHALL BE AS REQUIRED BY THE CITY ENGINEER.
3. LINEAR "RADIUS" AT CORNERS, PERMITTED FOR "SINGLE FAMILY" OR "TWO FAMILY" RESIDENTIAL DRIVEWAY APPROACH.
4. SIDEWALK LOCATION TO BE APPROVED BY CITY ENGINEER PRIOR TO FINAL DESIGN. SIDEWALK WIDTH SHALL BE DETERMINED BY BUILDING PERMIT.
5. SIDEWALK TO BE CONSTRUCTED PER DETAILS T-14 OR T-15, AS APPLICABLE.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

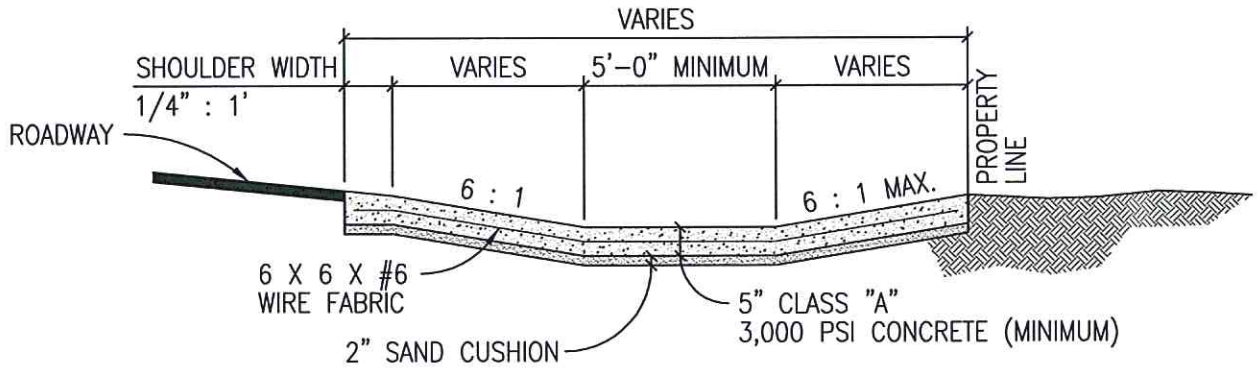
CONCRETE DRIVEWAY APPROACH TYPICAL

CONSTRUCTION STANDARDS AND DETAILS

T-17
SCALE: N.T.S.
ISSUE DATE: 03-12-13



PLAN



SECTION A-A

NOTES:

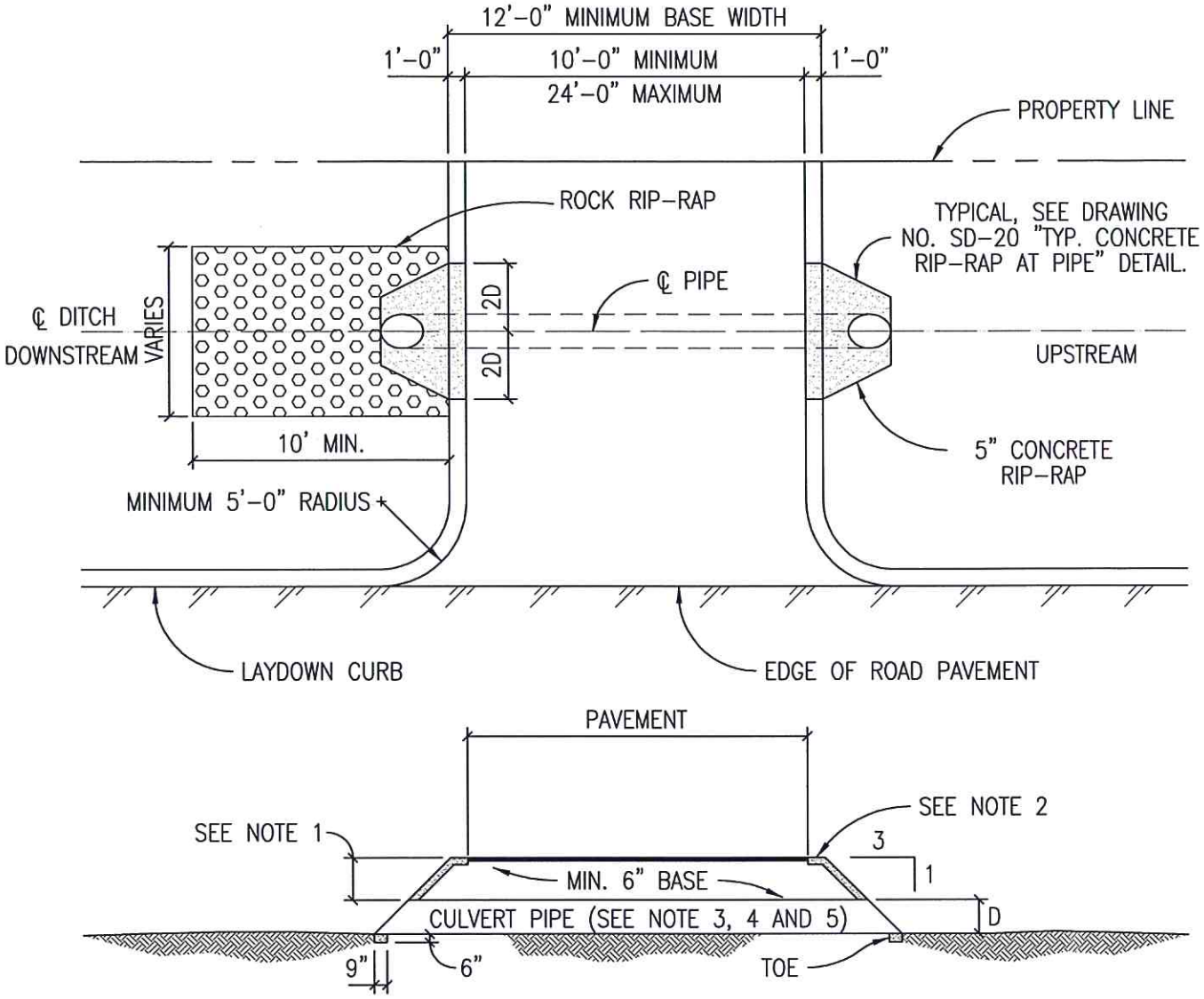
1. ROCK RIP-RAP SHALL EXTEND 10' MINIMUM FROM THE DOWN STREAM SIDE AND 5' MINIMUM FROM THE UPSTREAM SIDE USING THE AVERAGE STONE SIZE, AS DETERMINED BY THE ENGINEER.
2. MINIMUM CHANNEL SIDE SLOPE SHALL BE 4:1.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

CONCRETE DIP
DRIVEWAY APPROACH

CONSTRUCTION STANDARDS AND DETAILS

T-18
SCALE: N.T.S.
ISSUE DATE: 03-12-13



NOTES:

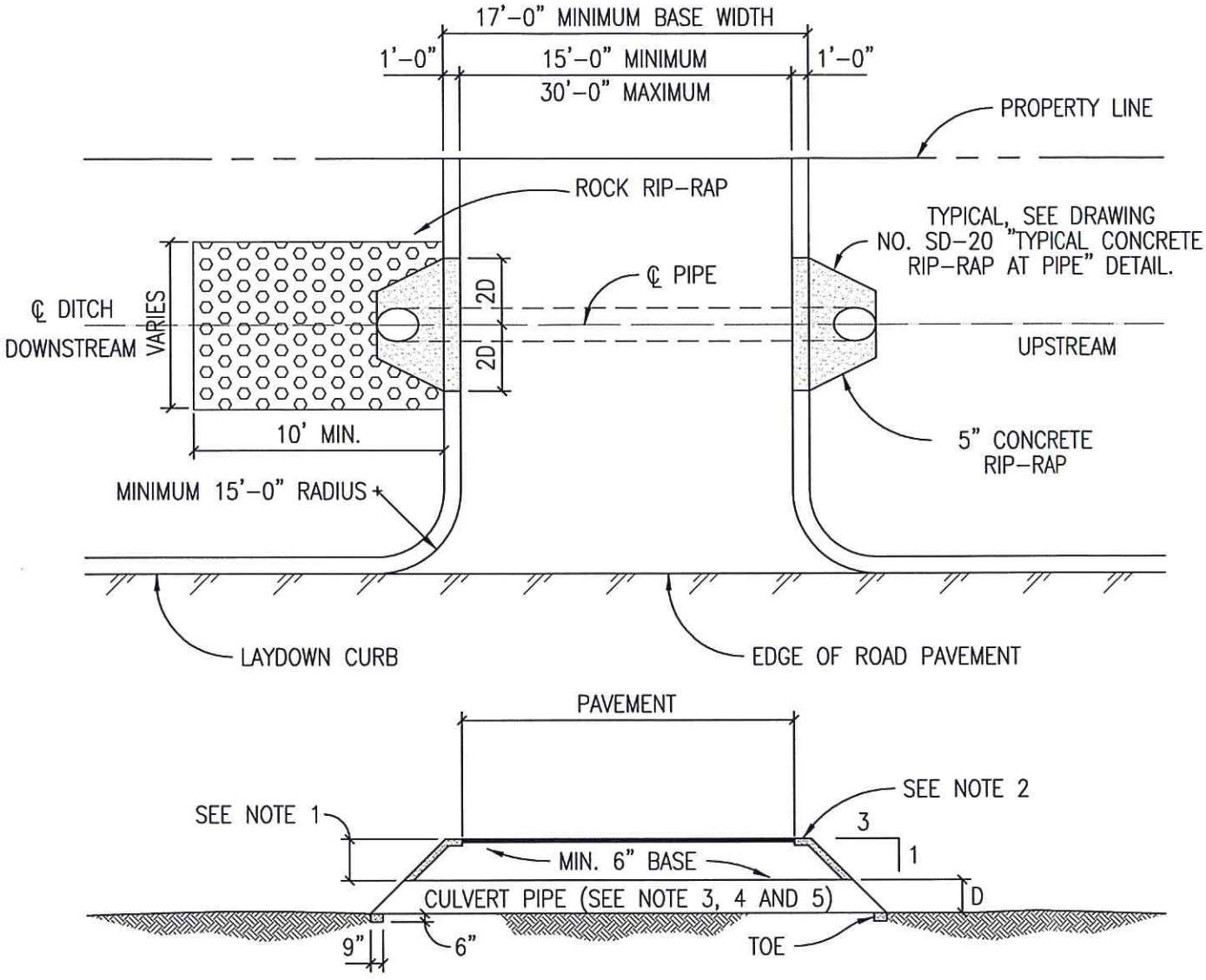
1. MINIMUM COVER OVER CULVERT PIPE SHALL BE 6" (SEE NOTE 5).
2. 5" CONCRETE RIP-RAP SHALL BE INSTALLED.
3. CULVERT PIPE TO BE MINIMUM OF 18" DIAMETER.
4. CULVERT PIPE MATERIAL TO BE CMP/R.C.P. (CLASS IV), UNLESS PRIOR APPROVAL IS GRANTED BY THE CITY OF KILLEEN.
5. MINIMUM COVER OVER CULVERT PIPE SHALL PROVIDE H20 LOADING.
6. BACKFILL AROUND CULVERT PIPE SHALL BE SELECT MATERIAL TO BE PLACED AND COMPACTED TO 95% TEX-114E.
7. RIP-RAP SHALL EXTEND 10' FROM THE DOWN STREAM SIDE USING THE NOMINAL STONE SIZE AS DETERMINED BY THE ENGINEER.
8. MINIMUM CHANNEL SIDE SLOPE SHALL BE 4:1.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

RURAL RESIDENTIAL DRIVEWAY APPROACH WITH CULVERT PIPE

CONSTRUCTION STANDARDS AND DETAILS

T-19
SCALE: N.T.S.
ISSUE DATE: 03-12-13



NOTES:

1. MINIMUM COVER OVER CULVERT PIPE SHALL BE 6" (SEE NOTE 5).
2. 5" CONCRETE RIP-RAP SHALL BE INSTALLED.
3. CULVERT PIPE TO BE MINIMUM OF 18" DIAMETER.
4. CULVERT PIPE MATERIAL TO BE CMP/R.C.P. (CLASS IV), UNLESS PRIOR APPROVAL IS GRANTED BY THE CITY OF KILLEEN. CLASS III RCP MAY BE USED WHERE A MINIMUM OF 12" OF BASE IS PLACED.
5. MINIMUM COVER OVER CULVERT PIPE SHALL PROVIDE H20 LOADING.
6. BACKFILL AROUND CULVERT PIPE SHALL BE SELECT MATERIAL TO BE PLACED AND COMPACTED TO 95% TEX-114E.
7. ROCK RIP-RAP SHALL SHALL EXTEND 10' FROM THE DOWN STREAM SIDE USING THE AVERAGE STONE SIZE DIA. OF 8" AT A DEPTH OF 16" (MINIMUM).
8. MINIMUM CHANNEL SIDE SLOPE SHALL BE 4:1.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

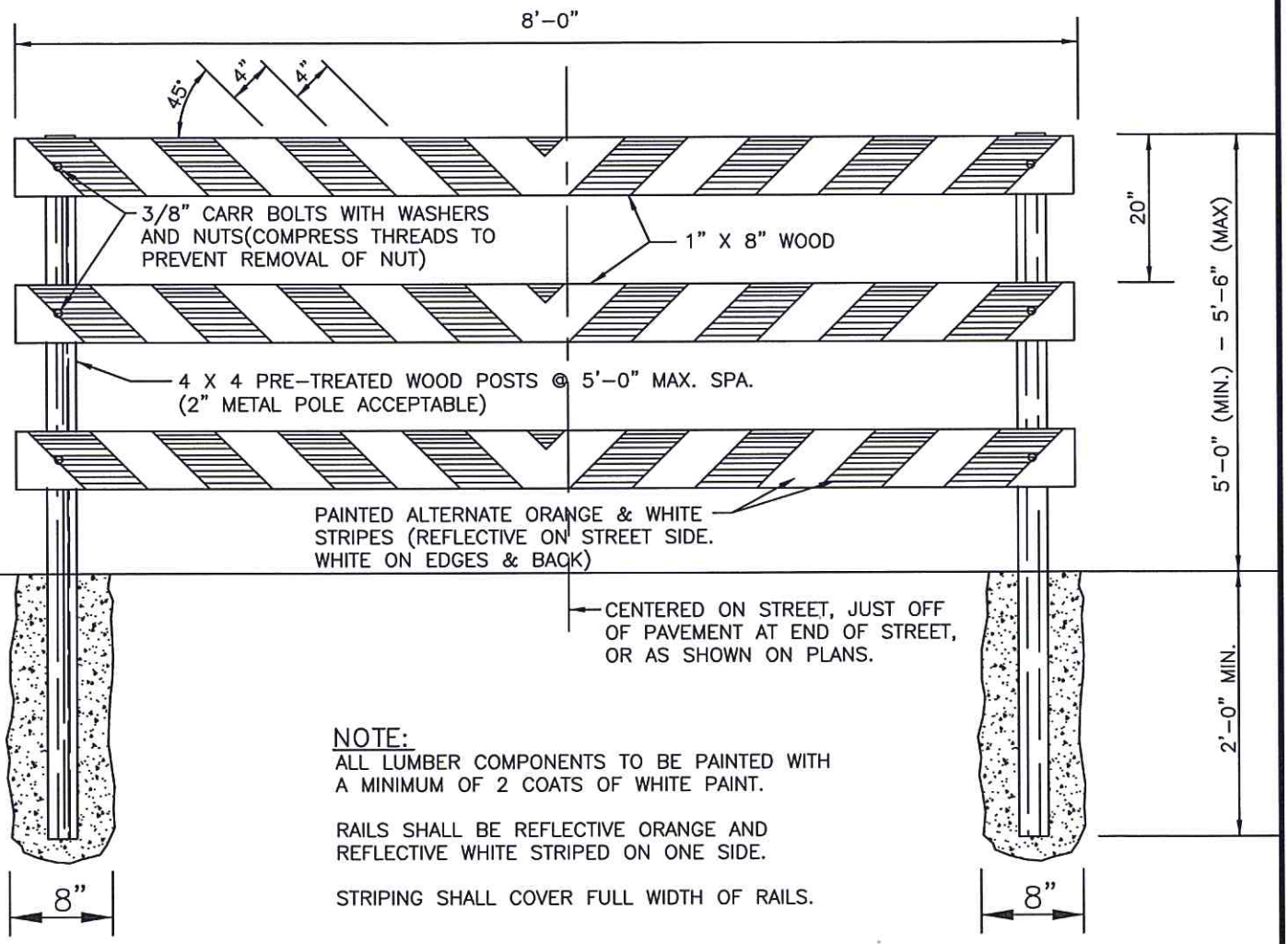
RURAL NON-RESIDENTIAL UNDIVIDED DRIVEWAY APPROACH WITH CULVERT PIPE

CONSTRUCTION STANDARDS AND DETAILS

T-20
SCALE: N.T.S.
ISSUE DATE: 03-12-13

SAFETY PROVISIONS:

THE CONTRACTOR SHALL COMPLY WITH "TEXAS MANUAL, UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," VOLUME NO. 1, PART NO6, WITH CURRENT CHANGES.



NOTE:

ALL LUMBER COMPONENTS TO BE PAINTED WITH A MINIMUM OF 2 COATS OF WHITE PAINT.

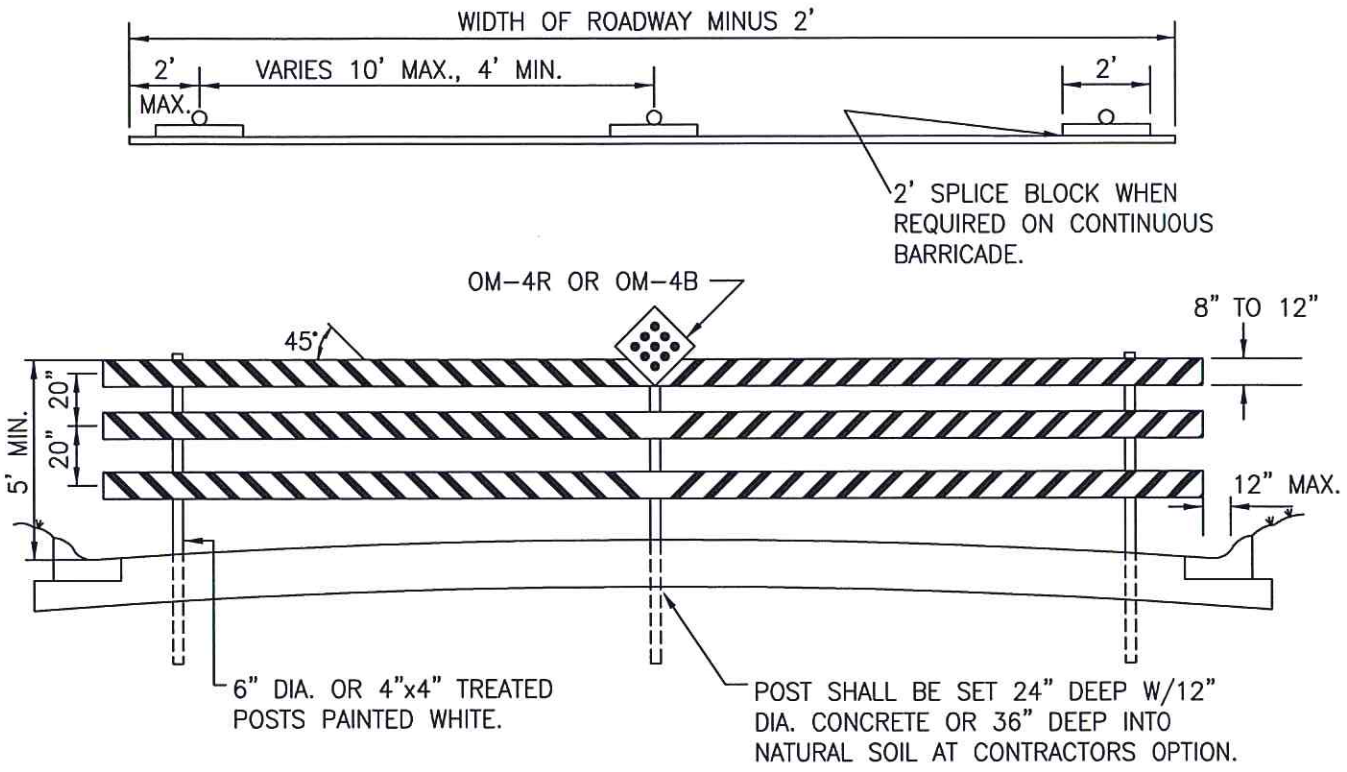
RAILS SHALL BE REFLECTIVE ORANGE AND REFLECTIVE WHITE STRIPED ON ONE SIDE.

STRIPING SHALL COVER FULL WIDTH OF RAILS.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

STANDARD
TYPE III BARRICADE – SHORT TERM
CONSTRUCTION STANDARDS AND DETAILS

T-21
SCALE: N.T.S.
ISSUE DATE: 03-12-13



GENERAL NOTES FOR THIN WALL TUBE TYPE SIGN SUPPORT:

1. THE BASE SOCKET IS FORMED FROM 2 7/8 " O.D. X 12 GAUGE GALVANIZED PIPE.
2. THE WEDGE IS FORMED FROM 11 GAUGE STEEL GALVANIZED PER ASTM A525.
3. THE SIGN POST IS 2.375" O.D. X 0.095" THIN WALL STEEL TUBING.
4. STEEL SUPPORTS SHALL BE MADE FROM NEW MATERIAL AND SHALL BE CORROSION RESISTANT. STEEL SUPPORTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATIONS A123 OR A525 (G-90 OR BETTER).
5. SUPPORTS SHALL BE STRAIGHT WITHIN 1/4 " PER 5 FEET OF LENGTH AND SHALL HAVE A SMOOTH, UNIFORM FINISH FREE FROM DEFECTS AFFECTING STRENGTH OR APPEARANCE. ANY BOLT HOLES AND SHEARED ENDS SHALL BE FREE FROM BURRS. BASES OF MULTISECTION SUPPORTS SHALL NOT EXTEND MORE THAN 5 INCHES ABOVE GROUND WHEN INSTALLED.
6. BOLTS, NUTS, SCREWS, WASHERS AND OTHER MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE TO ASTM DESIGNATION: A153 CLASS C OR D, OR B695 CLASS 50.
7. BARRICADE SUPPORTS SYSTEMS USED ON THIS SHEET MAY BE SUITABLE FOR ONLY CERTAIN SOIL TYPES. THE CONTRACTOR IS RESPONSIBLE FOR SELECTING THE APPROPRIATE SUPPORT SYSTEM FOR SOIL CONDITIONS ON EACH PROJECT.

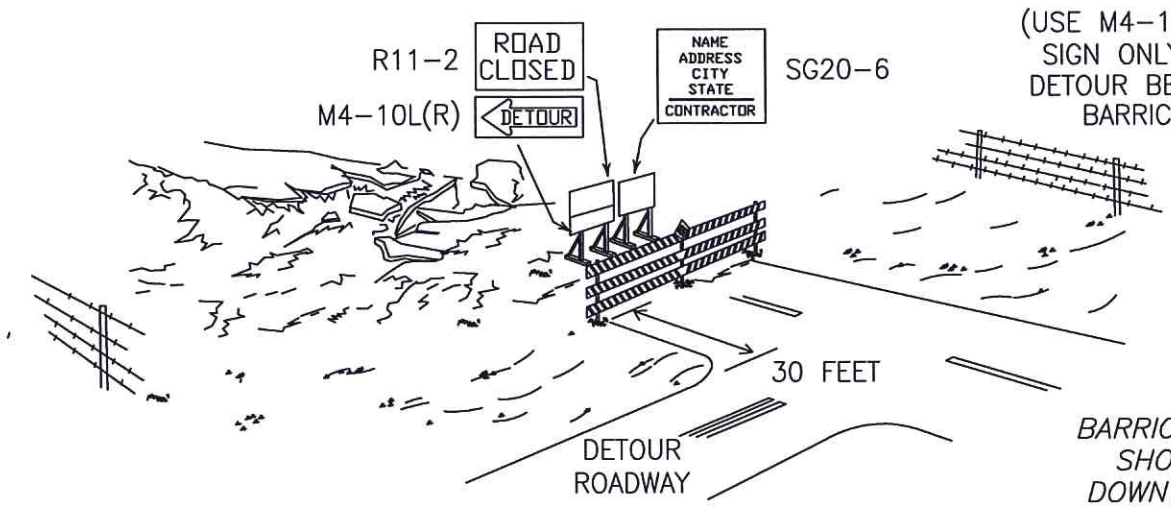
TYPE III BARRICADES:

1. REFER TO THE COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD) FOR DETAILS OF THE TYPE III BARRICADES AND A LIST OF ALL MATERIALS USED IN THE CONSTRUCTION OF TYPE III BARRICADES.
2. TYPE III BARRICADES SHALL BE USED AT EACH END OF CONSTRUCTION PROJECTS CLOSED TO ALL TRAFFIC.
3. BARRICADES EXTENDING ACROSS A ROADWAY SHOULD HAVE STRIPES THAT SLOPE DOWNWARD IN THE DIRECTION TOWARD WHICH TRAFFIC MUST TURN IN DETOURING. WHEN BOTH RIGHT AND LEFT TURNS PROVIDED, THE CHEVRON STRIPING MAY SLOPE DOWNWARD IN BOTH DIRECTIONS FROM THE CENTER OF THE BARRICADE.
4. STRIPING OF RAILS, FOR THE RIGHT SIDE OF THE ROADWAY, SHOULD SLOPE DOWNWARD TO THE LEFT. FOR THE LEFT SIDE OF THE ROADWAY, STRIPING SHOULD SLOPE DOWNWARD TO THE RIGHT.
5. IDENTIFICATION MARKINGS MAY BE SHOWN ONLY ON THE BACK OF THE BARRICADE RAILS. THE MAXIMUM HEIGHT OF LETTERS AND/OR COMPANY LOGOS USED FOR IDENTIFICATION SHALL BE 1".
6. BARRICADES SHALL NOT BE PLACED PARALLEL TO TRAFFIC UNLESS AN ADEQUATE CLEAR ZONE IS PROVIDED.
7. WARNING LIGHTS SHALL NOT BE INSTALLED ON BARRICADES.
8. WHERE BARRICADES REQUIRE THE USE OF WEIGHTS TO KEEP FROM TURNING OVER, THE USE OF SANDBAGS WITH DRY, COHESIONLESS SAND IS RECOMMENDED. THE SANDBAGS WILL BE TIED SHUT TO KEEP THE SAND FROM SPILLING AND TO MAINTAIN A CONSTANT WEIGHT. ROCK, CONCRETE, IRON, STEEL OR OTHER SOLID OBJECTS WILL NOT BE PERMITTED. SANDBAGS SHOULD WEIGH A MINIMUM OF 35 LBS A MAXIMUM OF 50 LBS. SANDBAGS SHALL BE MADE OF A DURABLE MATERIAL THAT TEARS UPON VEHICULAR IMPACT. RUBBER (SUCH AS TIRE INNER TUBES) SHALL NOT BE USED FOR SANDBAGS. SANDBAGS SHALL ONLY BE PLACED ALONG OR UPON THE BASE SUPPORTS OF THE DEVICE AND SHALL NOT BE SUSPENDED ABOVE GROUND LEVEL OR HUNG WITH ROPE, WIRE, CHAINS OR OTHER FASTENERS.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

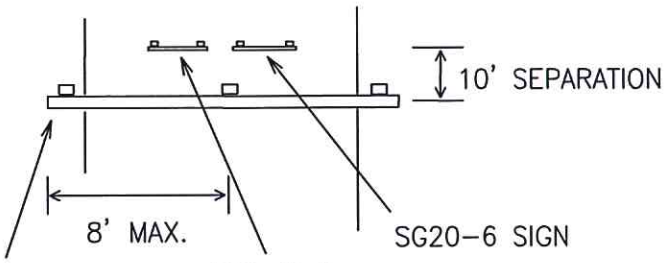
STANDARD
TYPE III BARRICADE – LONG TERM
CONSTRUCTION STANDARDS AND DETAILS

T-22
SCALE: N.T.S.
ISSUE DATE: 03-12-13



PERSPECTIVE

BARRICADE STRIPING SHOULD SLANT DOWNWARD IN THE DIRECTION OF DETOUR.



EACH ROADWAY OF DIVIDED HIGHWAY SHALL BE BARRICADED, IN THE SAME MANNER.

BARRICADES RAILS SHALL BE REFLECTORIZED ON ALL SIDES THAT FACE TRAFFIC.

PLAN

1). R11-2 AND M4-10 SIGNS SHOULD BE MOUNTED ON INDEPENDENT SUPPORTS AT 7' MOUNTING HEIGHT IN CENTER OF ROADWAY.

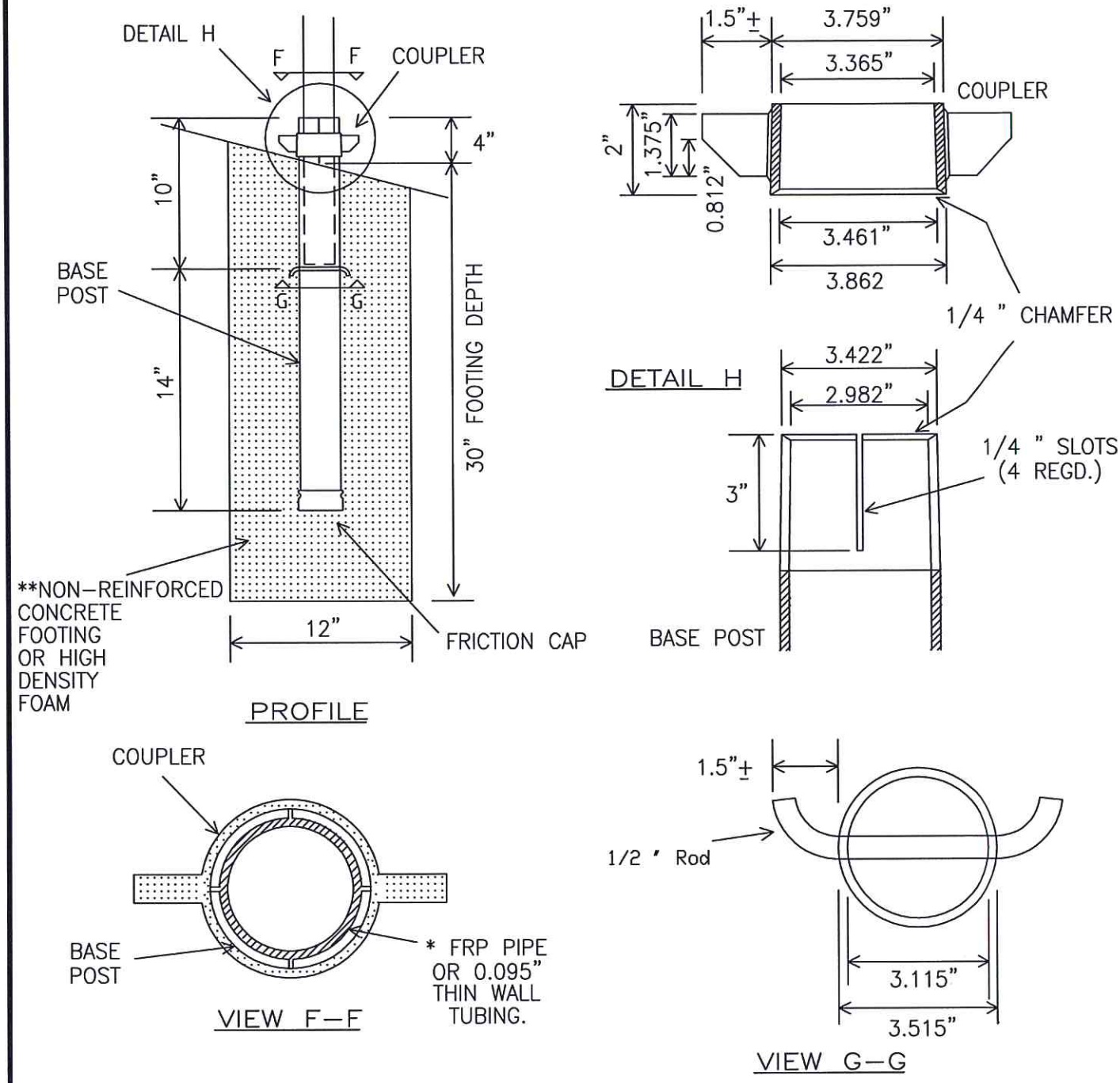
2). ADVANCE SIGNING, INCLUDING CONSTRUCTION WARNING, SIGNS AND DETOUR SIGNING SHALL BE AS SPECIFIED ELSEWHERE IN THE PLANS.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

TYPE III BARRICADE (POST TYPE) TYPICAL APPLICATION

CONSTRUCTION STANDARDS AND DETAILS

T-23
SCALE: N.T.S.
ISSUE DATE: 03-12-13



* PLASTING INSERT MUST BE USED WITH 1/16 " THIN WALL TUBING.

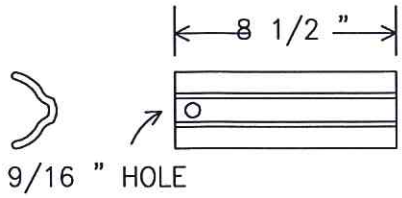
** FOOTING SHALL BE REMOVED AND BACKFILLED WHEN BARRICADE IS REMOVED.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

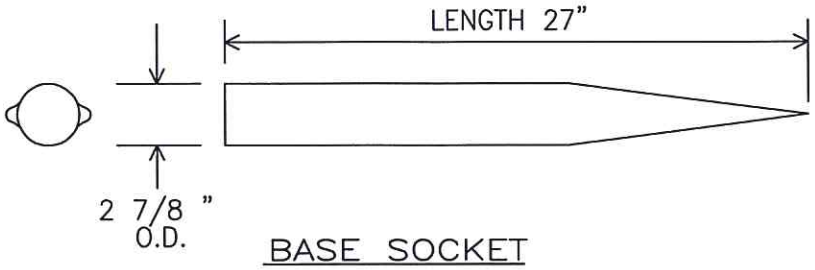
UNIVERSAL ANCHOR SYSTEM (TYPE III BARRICADE)

CONSTRUCTION STANDARDS AND DETAILS

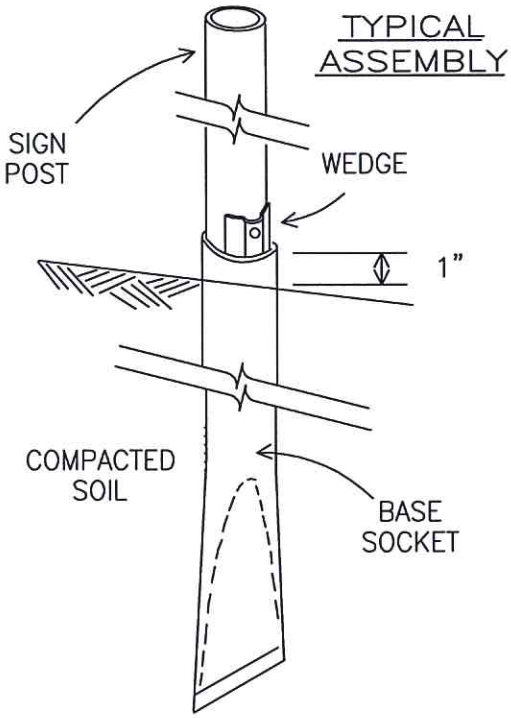
T-24
SCALE: N.T.S.
ISSUE DATE: 03-12-13

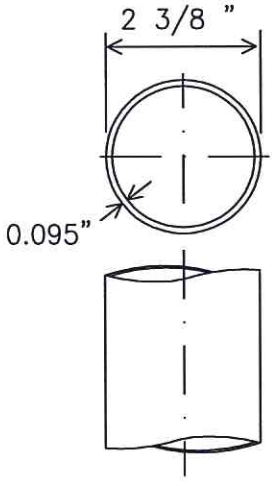


WEDGE



BASE SOCKET





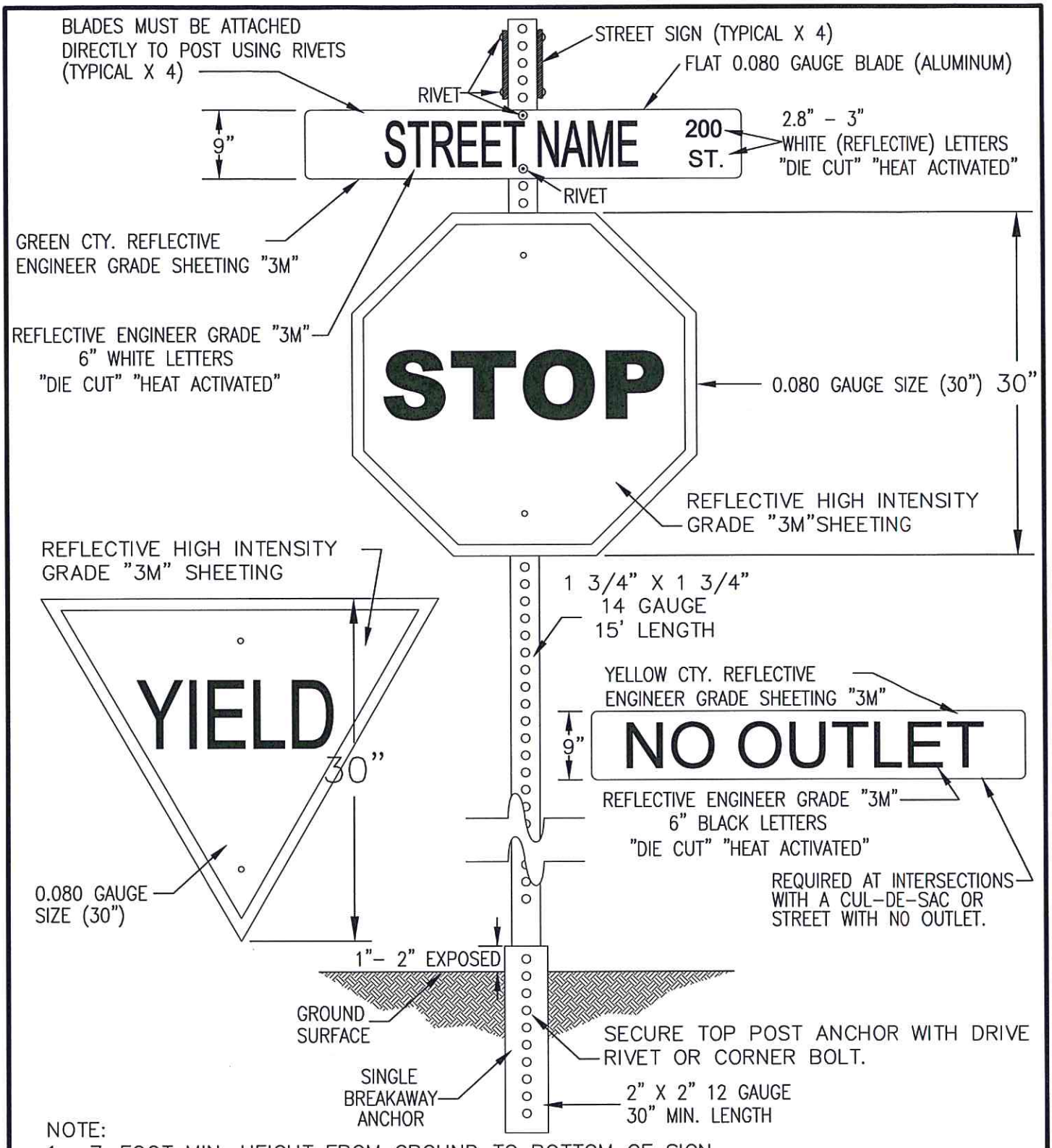
SIGN
POST

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

POZ-LOC
(DRIVABLE, TYPE III BARRICADE)

CONSTRUCTION STANDARDS AND DETAILS

T-25
SCALE: N.T.S.
ISSUE DATE: 03-12-13



NOTE:
1. 7–FOOT MIN. HEIGHT FROM GROUND TO BOTTOM OF SIGN.

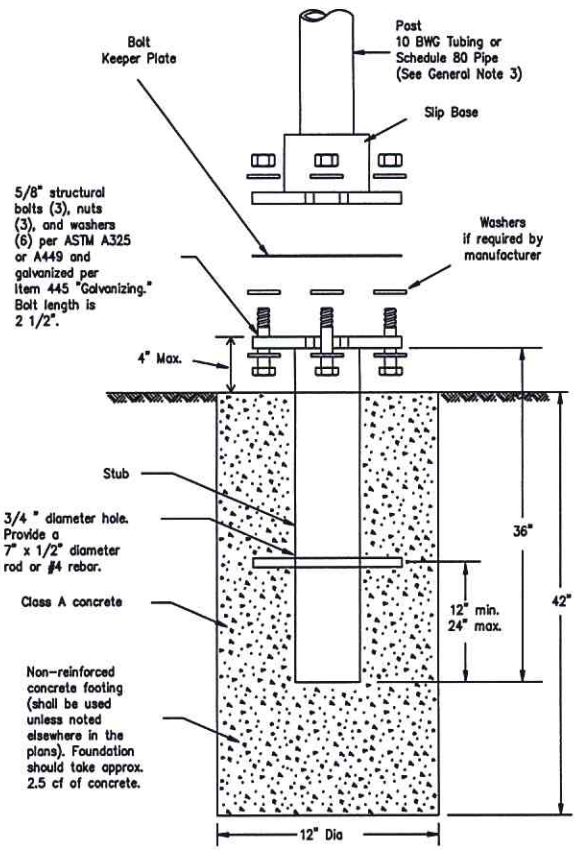
CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

STANDARD STREET SIGN DETAIL

CONSTRUCTION STANDARDS AND DETAILS

T-26
SCALE: N.T.S.
ISSUE DATE: 03-12-13

TRIANGULAR SLIPBASE INSTALLATION GENERAL REQUIREMENTS

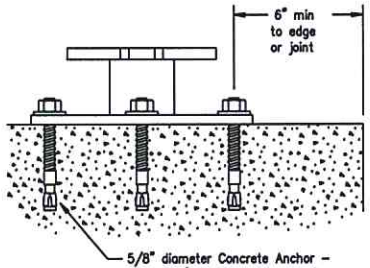


SM RD SGN ASSM TY XXXXX(X)SA(X-XXXX)

NOTE

There are various devices approved
for the Triangular Slipbase System.
Please reference the Material Producer
List for approved slip base systems.
http://www.txdot.gov/business/producer list.htm_
The devices shall be installed per
manufacturers' recommendations.
Installation procedures shall be
provided to the Engineer by Contractor.

CONCRETE ANCHOR



SM RD SGN ASSM TY XXXXX(X)SB(X-XXXX)

Concrete anchor consists of 5/8" diameter stud bolt with UNC series bolt threads on the upper end. Heavy hex nut per ASTM A563, and hardened washer per ASTM F436. The stud bolt shall have a minimum yield and ultimate tensile strength of 50 and 75 KSI, respectively. Nuts, bolts and washers shall be galvanized per Item 445, "Galvanizing." Adhesive type anchors shall have stud bolts installed with Type III epoxy per DMS-6100, "Epoxies and Adhesives." Adhesive anchors may be loaded after adequate epoxy cure time per the manufacturer's recommendations. Top of bolt shall extend at least flush with top of the nut when installed. The anchor, when installed in 4000 psi normal-weight concrete with a 5 1/2" minimum embedment, shall have a minimum allowable tension and shear of 3900 and 3100 psi, respectively.

GENERAL NOTES:

1. Slip base shall be permanently marked to indicate manufacturer. Method, design, and location of marking are subject to approval of the TxDOT Traffic Standards Engineer.
2. Material used as post with this system shall conform to the following specifications:
   - 10 BWG Tubing (2.875" outside diameter)
     - 0.134" nominal wall thickness
     - Seamless or electric-resistance welded steel tubing or pipe
     - Steel shall be HSLAS Gr 55 per ASTM A1011 or ASTM A1008
     - Other steels may be used if they meet the following:
       - 55,000 PSI minimum yield strength
       - 70,000 PSI minimum tensile strength
       - 20% minimum elongation in 2"
     - Wall thickness (uncoated) shall be within the range of 0.122" to 0.138"
     - Outside diameter (uncoated) shall be within the range of 2.867" to 2.883"
     - Galvanization per ASTM A123 or ASTM A653 G210. For precoated steel tubing (ASTM A653), recoat tube outside diameter weld seam by metallizing with zinc wire per ASTM B833.
   - Schedule 80 Pipe (2.875" outside diameter)
     - 0.276" nominal wall thickness
     - Steel tubing per ASTM A500 Gr C
     - Other seamless or electric-resistance welded steel tubing or pipe with equivalent outside diameter and wall thickness may be used if they meet the following:
       - 46,000 PSI minimum yield strength
       - 62,000 PSI minimum tensile strength
       - 21% minimum elongation in 2"
     - Wall thickness (uncoated) shall be within the range of 0.248" to 0.304"
     - Outside diameter (uncoated) shall be within the range of 2.855" to 2.895"
     - Galvanization per ASTM A123
3. See the Traffic Operations Division website for detailed drawings of sign clamps and Texas Universal Triangular Slipbase System components. The website address is:
   http://www.txdot.gov/publications/traffic.htm
4. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.

ASSEMBLY PROCEDURE

Foundation

1. Prepare 12-inch diameter by 42-inch deep hole. If solid rock is encountered, the depth of the foundation may be reduced such that it is embedded a minimum of 18 inches into the solid rock.
2. The Engineer may permit batches of concrete less than 2 cubic yards to be mixed with a portable, motor-driven concrete mixer. For small placements less than 0.5 cubic yards, hand mixing in a suitable container may be allowed by Engineer. Concrete shall be Class A.
3. Push the pipe end of the slip base stub into the center of the concrete. Rotate the stub back and forth while pushing it down into the concrete to assure good contact between the concrete and stub. Continue to work the stub into the concrete until it is between 2 to 4 inches above the ground.
4. Plumb the stub. Allow a minimum of 4 days to set, unless otherwise directed by the Engineer.
5. The triangular slipbase system is multidirectional and is designed to release when struck from any direction.

Support

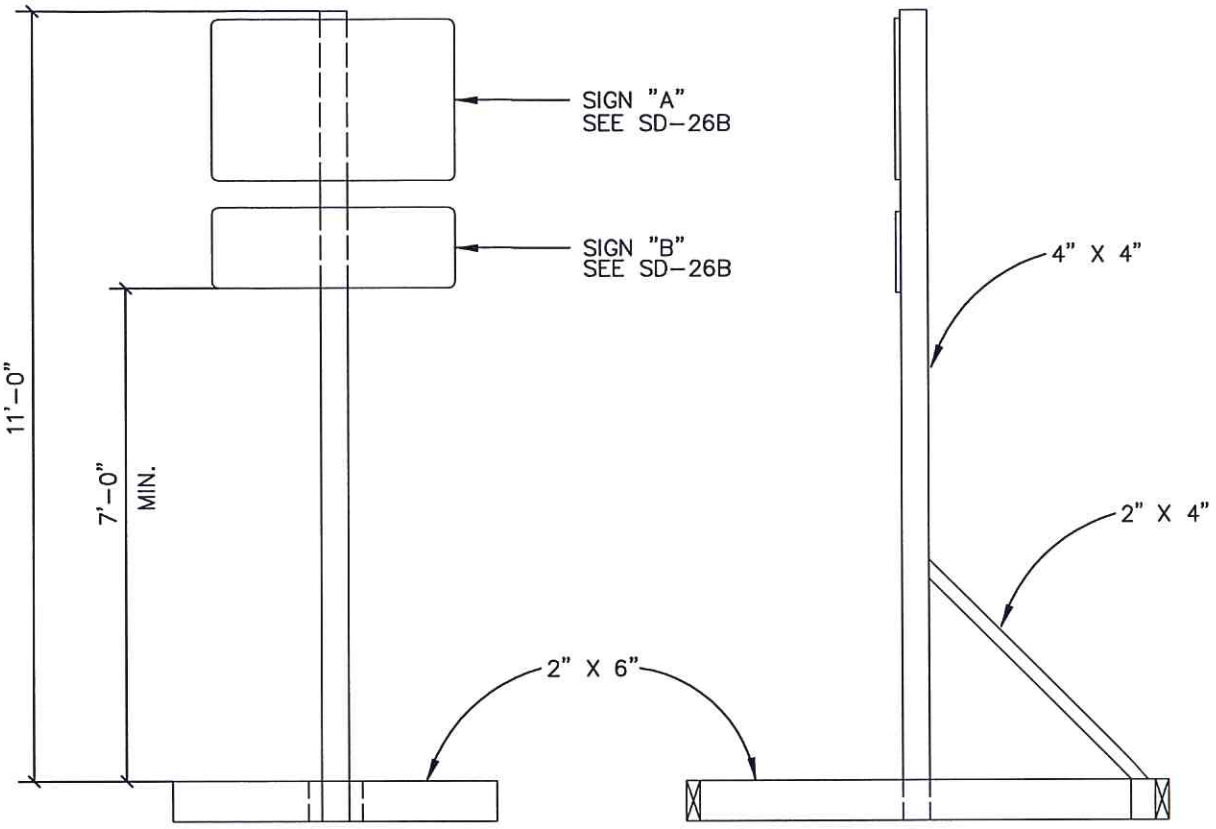
1. Cut support so that the bottom of the sign will be 7 to 7.5 feet above the edge of the travelway (i.e., edge of the closest lane) when slip plate is below the edge of pavement or 7 to 7.5 feet above slip plate when the slip plate is above the edge of the travelway. The cut shall be plumb and straight.
2. Attach sign to support using connections shown. When multiple signs are installed on the same support, ensure the minimum clearance between each sign is maintained. See SMD(SLIP-2) for clearances based on sign types.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS
CONSTRUCTION STANDARDS AND DETAILS

TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-1)-08

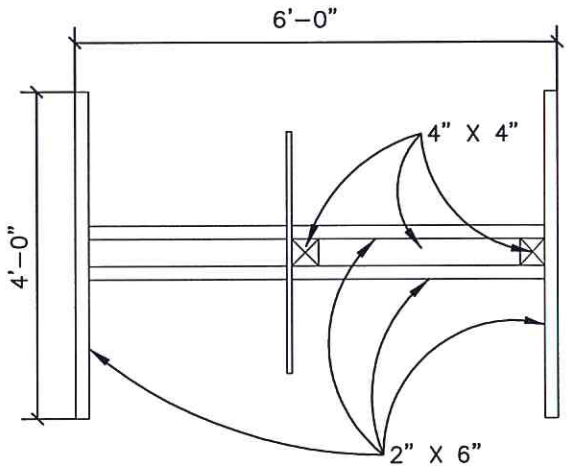
ISSUE DATE: 03-12-13
SCALE: N.T.S.

T-27



FRONT VIEW

SIDE VIEW



TOP VIEW

NOTES:

1. ALL MATERIALS SHALL BE FURNISHED BY THE CONTRACTOR WITH THE EXCEPTION OF THE CITY OF KILLEEN LOGO WHICH WILL BE FURNISHED BY THE CITY.
2. LUMBER DIMENSIONS ARE NOMINAL DIMENSIONS.
3. ANCHORS OR SANDBAGS SHALL BE USED TO HOLD PROJECT SIGN IN PLACE.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

PROJECT SIGN
TYPE II

CONSTRUCTION STANDARDS AND DETAILS

T-28
SCALE: N.T.S.
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NOTES:

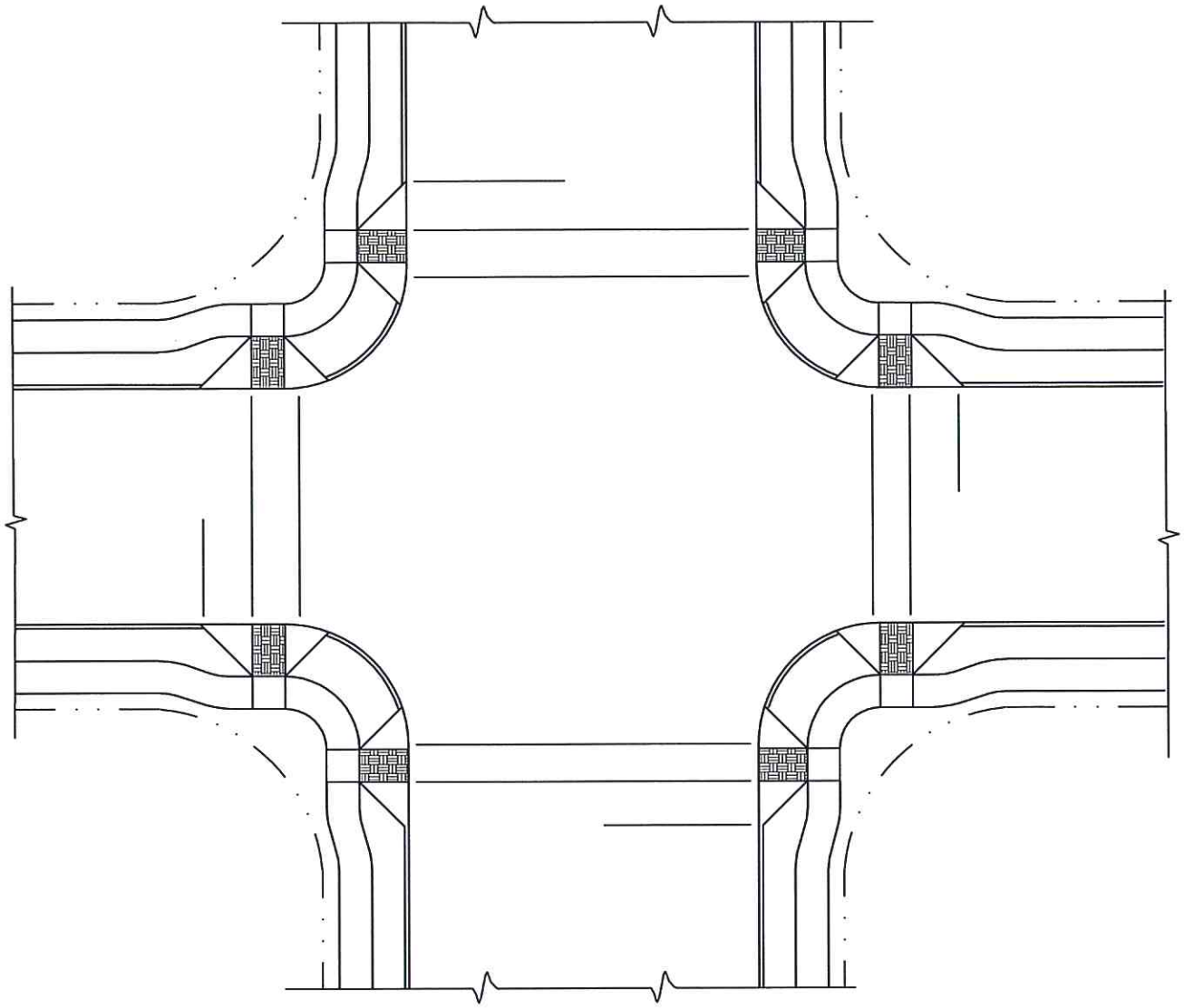
1. COMMERCIAL SIDEWALK WIDTHS – 6'
   RESIDENTIAL SIDEWALK WIDTHS – 5'
2. ALL SLOPES ARE MAXIMUM ALLOWABLE. FLATTER SLOPES THAT WILL STILL DRAIN PROPERLY ARE ENCOURAGED.
3. ALL CONCRETE SURFACES SHALL RECEIVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE IN THE PLANS.
4. FOR PURPOSES OF WARNING, THE CURB RAMPS SHALL HAVE A LIGHT REFLECTIVE VALUE AND TEXTURE THAT SIGNIFICANTLY CONTRASTS WITH THAT OF ADJOINING PEDESTRIAN ROUTES.
5. TEXTURES MAY CONSIST OF PAVERS WITH TRUNCATED DOMED SURFACES. TEXTURES ARE REQUIRED TO BE DETECTABLE UNDERFOOT. SURFACES THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED. TEXTURES SHALL BE AT LEAST 2–FEET IN LENGTH IN THE DIRECTION OF THE RAMP AND COVER THE WIDTH OF THE RAMP.
6. COLOR CONTRAST, FOR EXAMPLE, CAN BE ACCOMPLISHED WITH COLORED CONCRETE PAVERS THAT HAVE TRUNCATED DOMES WHICH WOULD PROVIDE A CONTRAST WITH TYPICALLY LIGHT COLORED CONCRETE.
7. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, VISIBILITY AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) PREPARED AND ADMINISTERED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR).
8. RAISED MEDIANS SEPARATE OPPOSING DIRECTIONS OF TRAFFIC AND PROVIDE A REFUGE AREA FOR PEDESTRIANS IF THEY ARE UNABLE TO CROSS THE ENTIRE ROADWAY IN THE ALLOTTED SIGNAL PHASE. TO SERVE AS A REFUGE AREA, THE MEDIAN SHOULD BE A MINIMUM OF 6 FEET WIDE. MEDIANS SHOULD BE DESIGNED TO PROVIDE ACCESSIBLE PASSAGE OVER OR THROUGH THEM.
9. ALL SIDEWALK PLANS AND DETAILS SHALL BE SUBMITTED TO AND APPROVED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR).
10. ANY PART OF THE ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 1:20 (5%) SHALL BE CONSIDERED A RAMP. IF A RAMP HAS A RISE GREATER THAN 6 INCHES OR A HORIZONTAL PROJECTION GREATER THAN 72 INCHES, THEN IT SHALL HAVE HANDRAILS ON BOTH SIDES. THE ONLY EXCEPTION IS AT CURB RAMPS. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. CURB RAMPS SHALL BE PROVIDED WHEREVER AN ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB. CURB RAMPS ARE GENERALLY INTERPRETED AS ONLY THE PORTION TYING DIRECTLY INTO THE ROADWAY.
11. TRAFFIC SIGNAL OR ILLUMINATION POLES, GROUND BOXES, CONTROLLER BOXES, SIGNS, DRAINAGE FACILITIES AND OTHER ITEMS SHALL BE PLACED SO NOT TO OBSTRUCT THE ACCESSIBLE ROUTE.
12. ALL SIDEWALKS WILL BE DOWELED INTO EXISTING SIDEWALKS, DRIVEWALKS, DRIVEWAYS, INLET BOXES, RETAINING WALLS, ETC.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

PEDESTRIAN RAMPS
GENERAL NOTES

CONSTRUCTION STANDARDS AND DETAILS

T–29
SCALE: N.T.S.
ISSUE DATE: 03–12–13



OFFSET SIDEWALKS

NOTE: CURB RAMPS WITH RETURNED CURBS INSTEAD OF SIDE FLARES ARE PERMITTED WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

TYPICAL
INTERSECTION LAYOUT

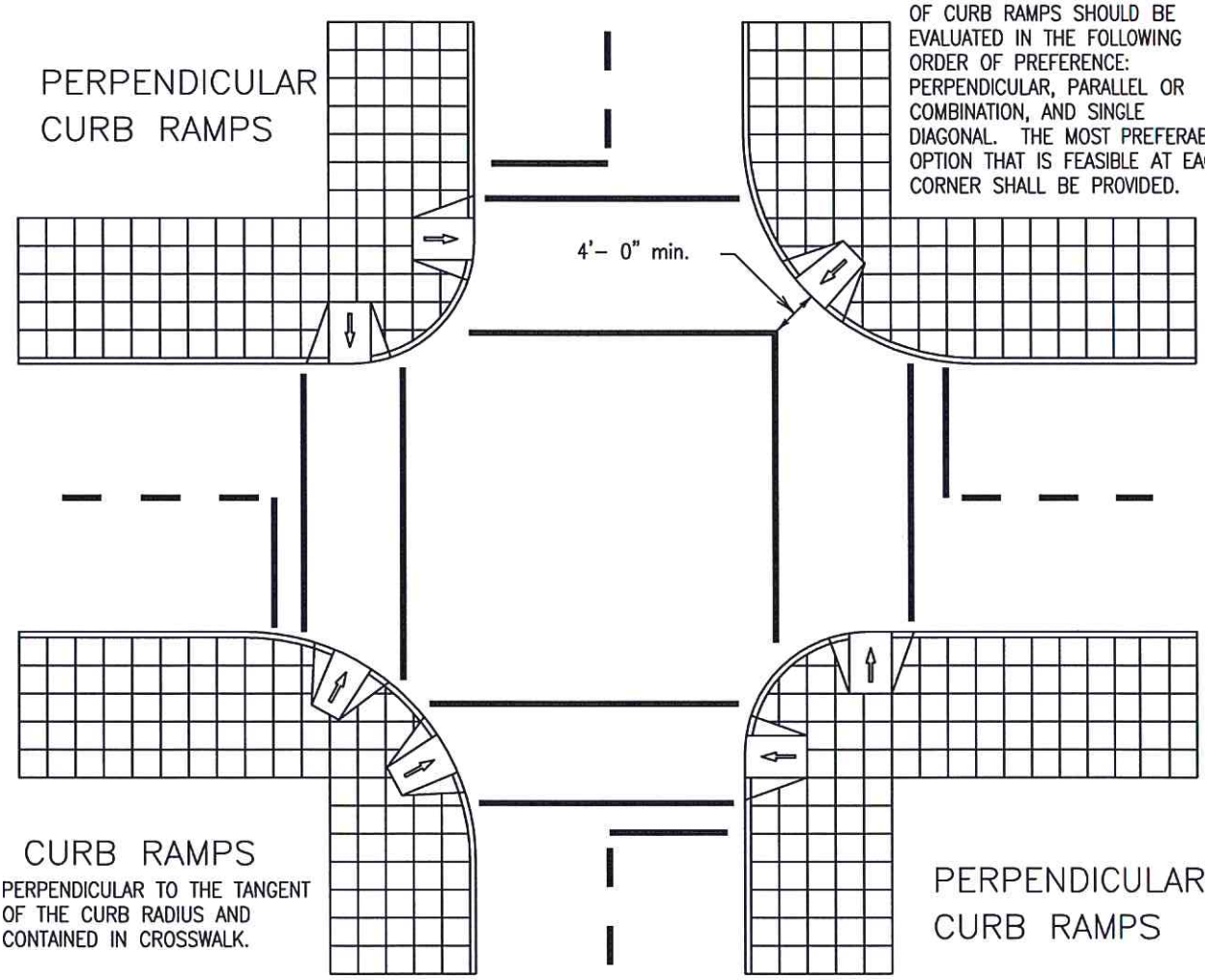
CONSTRUCTION STANDARDS AND DETAILS

T-30
SCALE: N.T.S.
ISSUE DATE: 03-12-13

SINGLE DIAGONAL CURB RAMP

FOR ON-SYSTEM NEW CONSTRUCTION, RECONSTRUCTION AND REHABILITATION PROJECTS WHERE PEDESTRIAN FACILITIES ARE NEWLY CONSTRUCTED OR SUBSTANTIALLY ALTERED, CONSTRUCTION OF SINGLE DIAGONAL RAMPS IS NOT PERMITTED.

FOR ON-SYSTEM PROJECTS SUCH AS RESTORATION, SEAL COAT AND OVERLAY PROJECTS, PLACEMENT OF CURB RAMPS SHOULD BE EVALUATED IN THE FOLLOWING ORDER OF PREFERENCE: PERPENDICULAR, PARALLEL OR COMBINATION, AND SINGLE DIAGONAL. THE MOST PREFERABLE OPTION THAT IS FEASIBLE AT EACH CORNER SHALL BE PROVIDED.



CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

CURB RAMPS
PLACEMENTS AT INTERSECTIONS

CONSTRUCTION STANDARDS AND DETAILS

T-31
SCALE: N.T.S.
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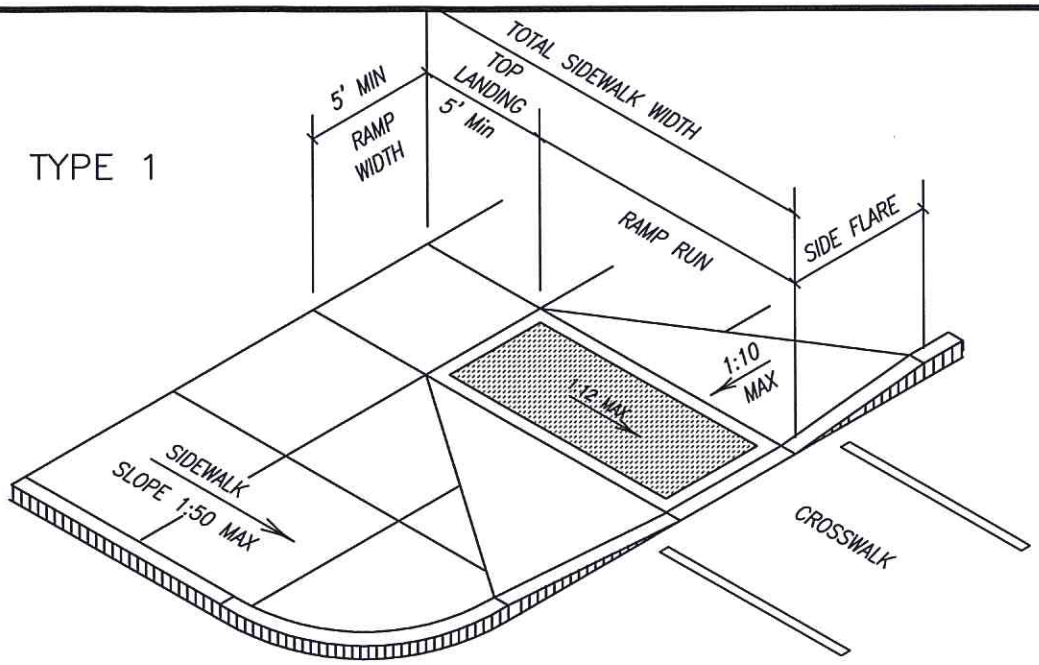
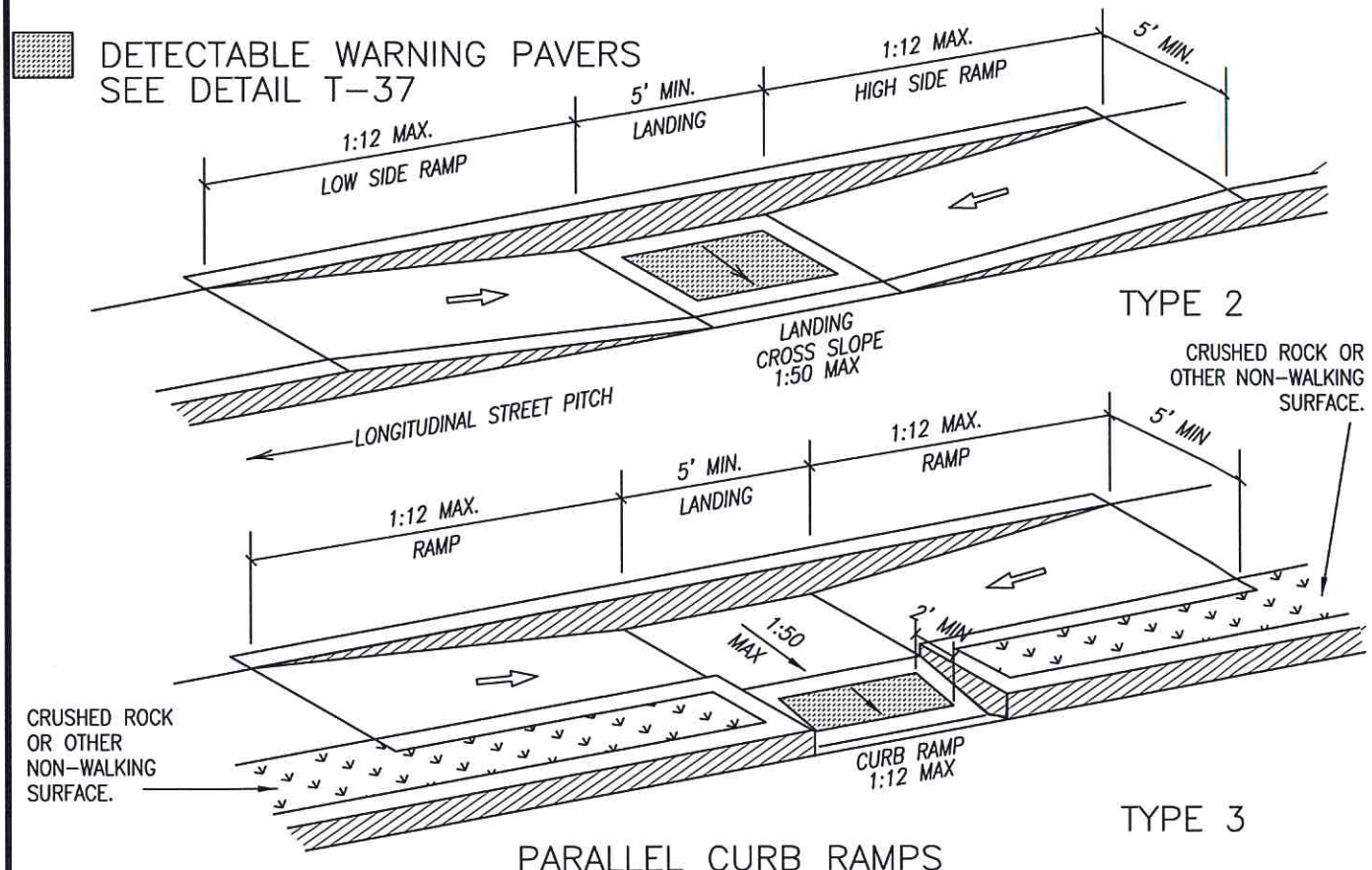


PERPENDICULAR CURB RAMPS



PARALLEL CURB RAMPS

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

SIDEWALK RAMP DETAILS
TYPE 1-3

CONSTRUCTION STANDARDS AND DETAILS

T-32
SCALE: N.T.S.
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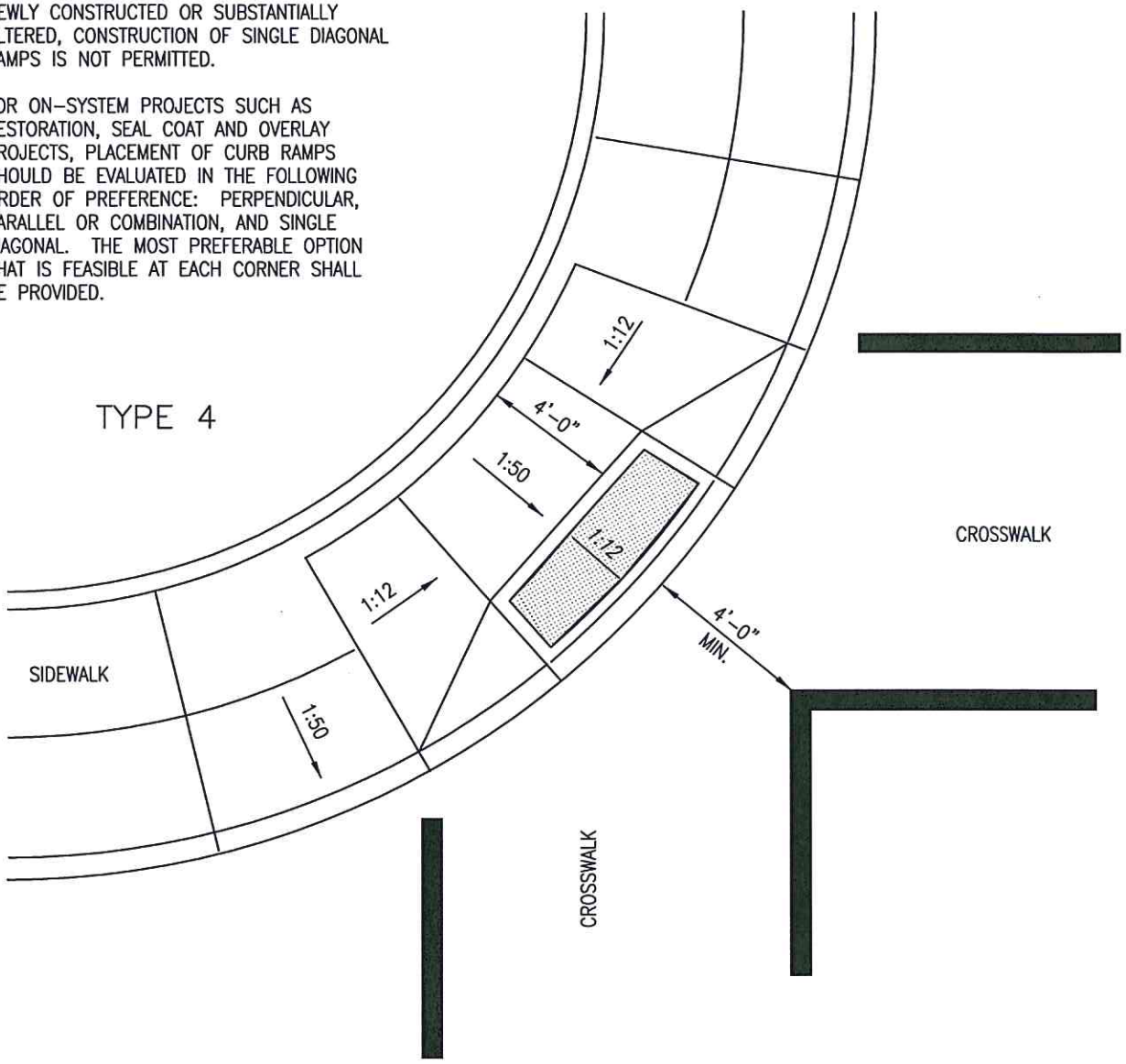
FOR ON-SYSTEM NEW CONSTRUCTION, RECONSTRUCTION AND REHABILITATION PROJECTS WHERE PEDESTRIAN FACILITIES ARE NEWLY CONSTRUCTED OR SUBSTANTIALLY ALTERED, CONSTRUCTION OF SINGLE DIAGONAL RAMPS IS NOT PERMITTED.

FOR ON-SYSTEM PROJECTS SUCH AS RESTORATION, SEAL COAT AND OVERLAY PROJECTS, PLACEMENT OF CURB RAMPS SHOULD BE EVALUATED IN THE FOLLOWING ORDER OF PREFERENCE: PERPENDICULAR, PARALLEL OR COMBINATION, AND SINGLE DIAGONAL. THE MOST PREFERABLE OPTION THAT IS FEASIBLE AT EACH CORNER SHALL BE PROVIDED.



SINGLE DIAGONAL CURB RAMP

PERPENDICULAR TO THE TANGENT OF THE CURB RADIUS AND CONTAINED IN CROSSWALK.

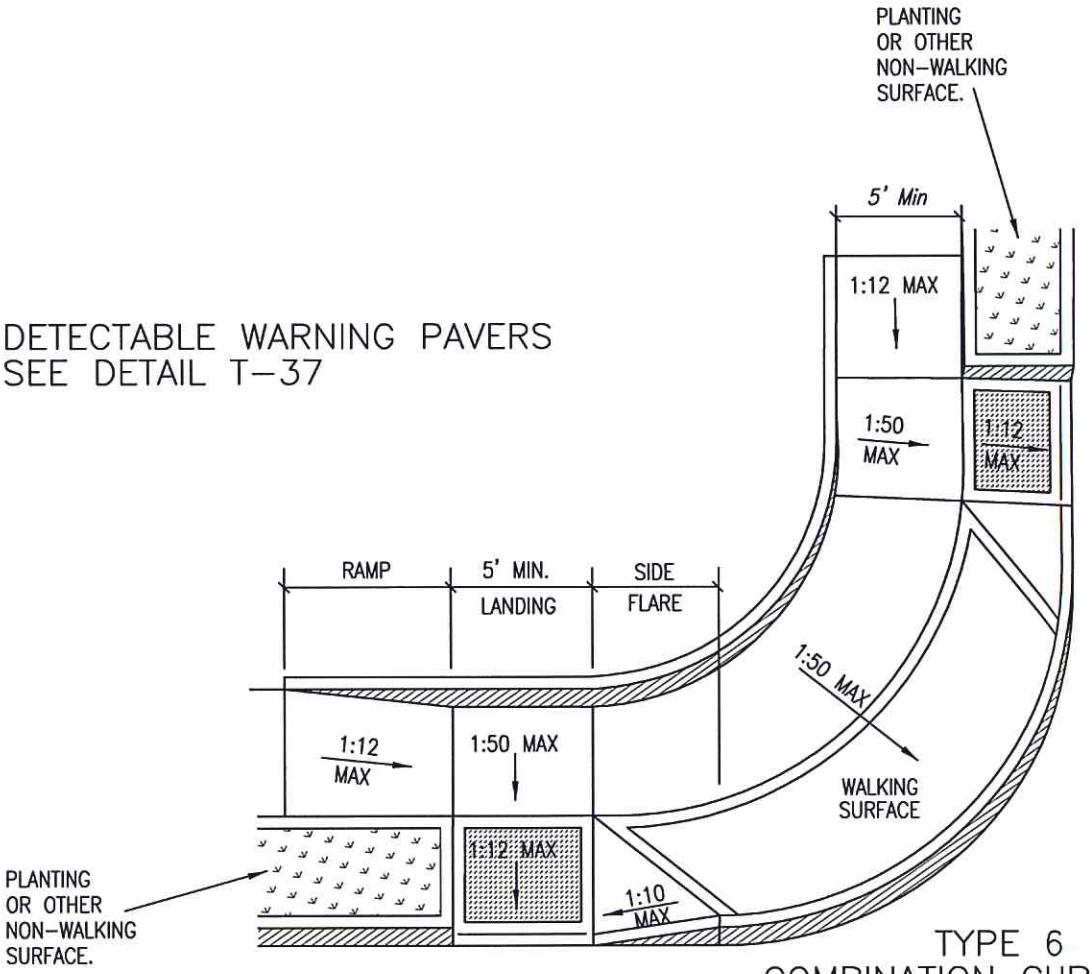
CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

SIDEWALK RAMP DETAILS
TYPE 4

CONSTRUCTION STANDARDS AND DETAILS

T-33
SCALE: N.T.S.
ISSUE DATE: 03-12-13

DETECTABLE WARNING PAVERS
SEE DETAIL T–37



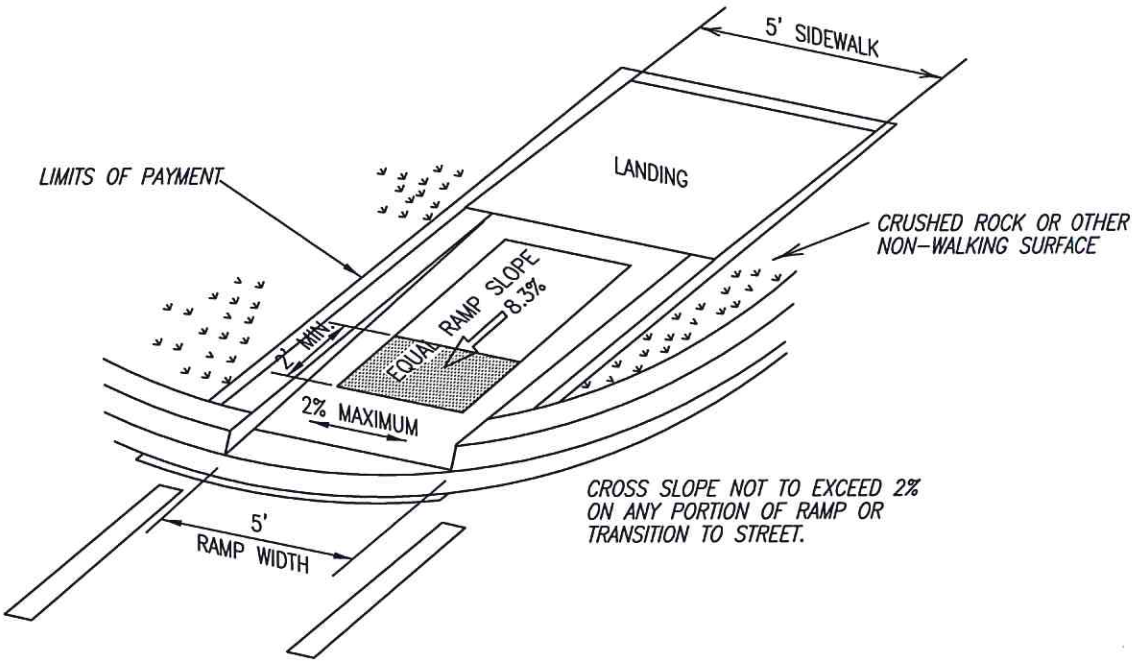
TYPE 6
COMBINATION CURB RAMP

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

SIDEWALK RAMP DETAILS
TYPE 6

CONSTRUCTION STANDARDS AND DETAILS

T–34
SCALE: N.T.S.
ISSUE DATE: 03–12–13



TYPE 7

DIRECTIONAL RAMP WITHIN RADIUS

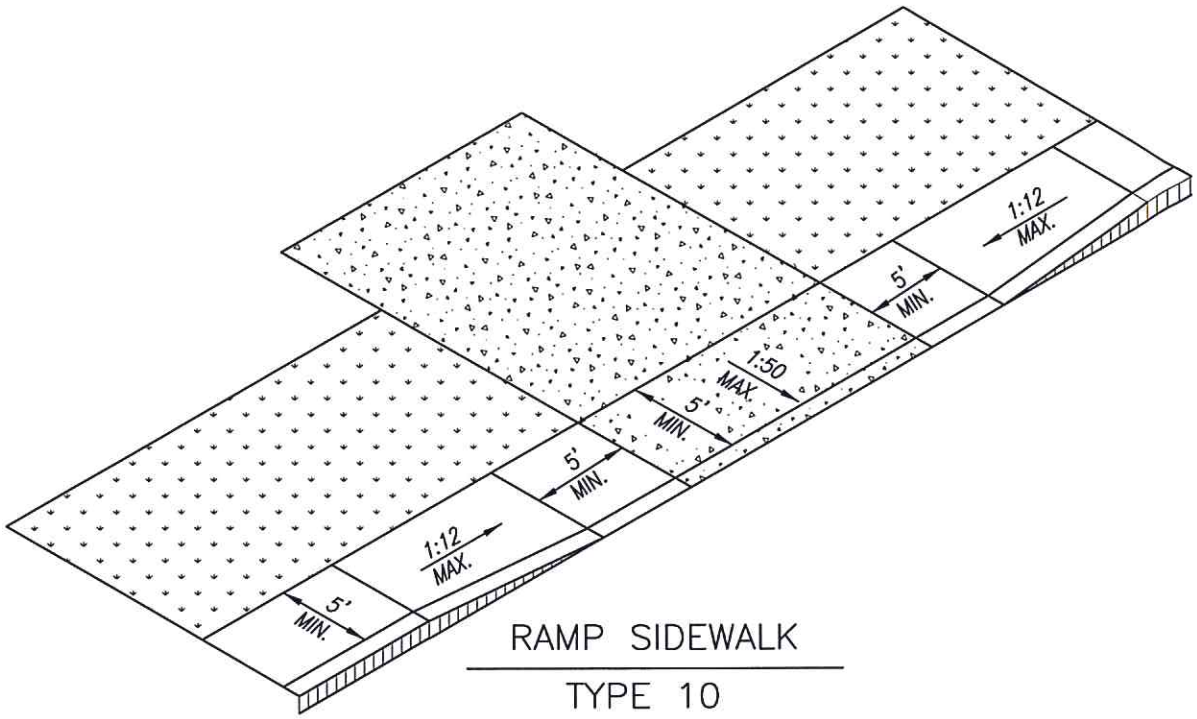
DETECTABLE WARNING PAVERS
SEE DETAIL T-37

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

SIDEWALK RAMP DETAILS
TYPE 7

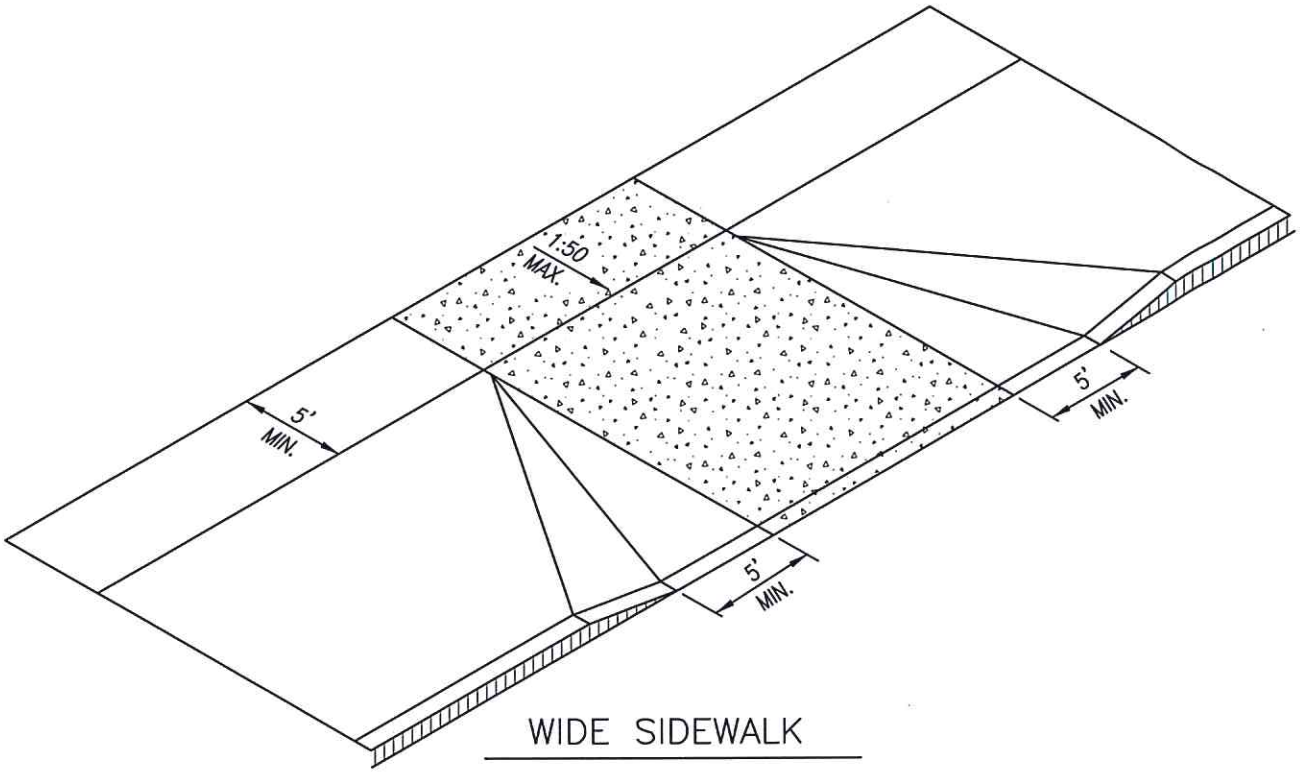
CONSTRUCTION STANDARDS AND DETAILS

T-35
SCALE: N.T.S.
ISSUE DATE: 03-12-13



RAMP SIDEWALK

TYPE 10



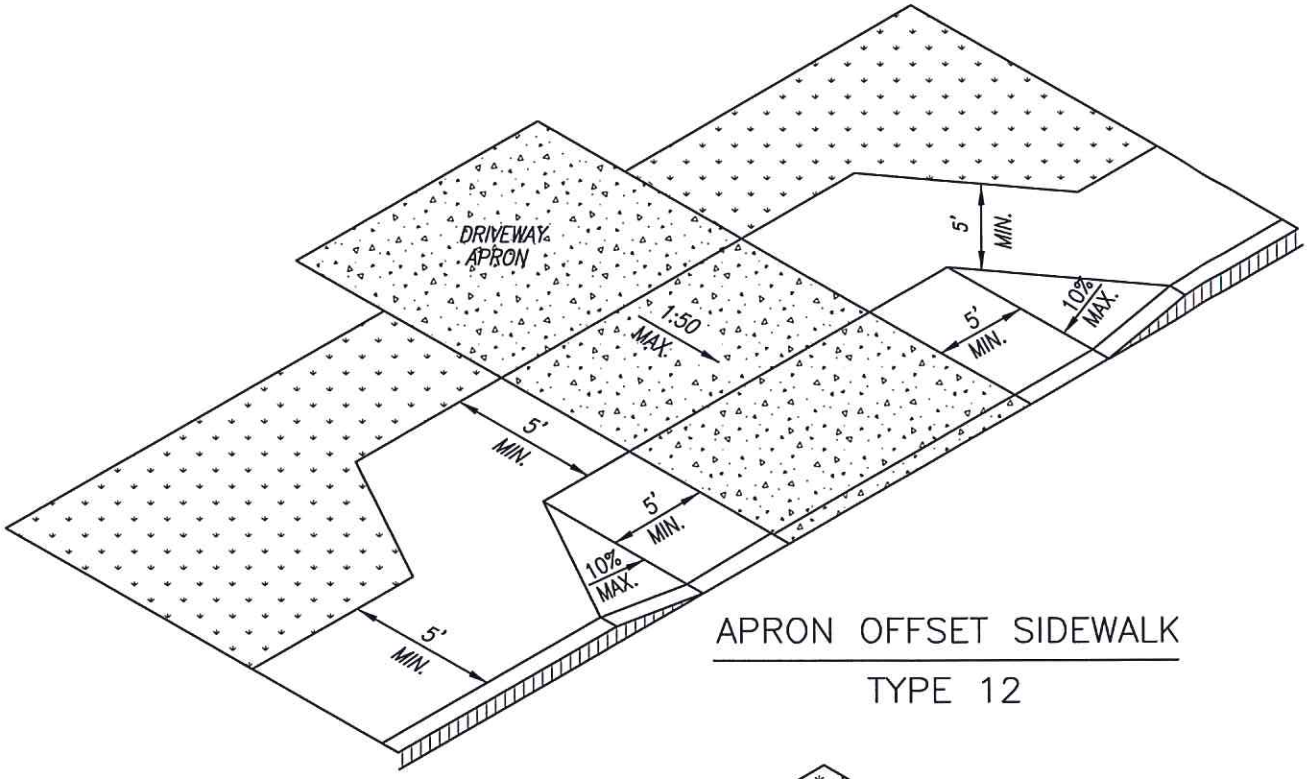
WIDE SIDEWALK

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

SIDEWALK TREATMENT AT DRIVEWAYS

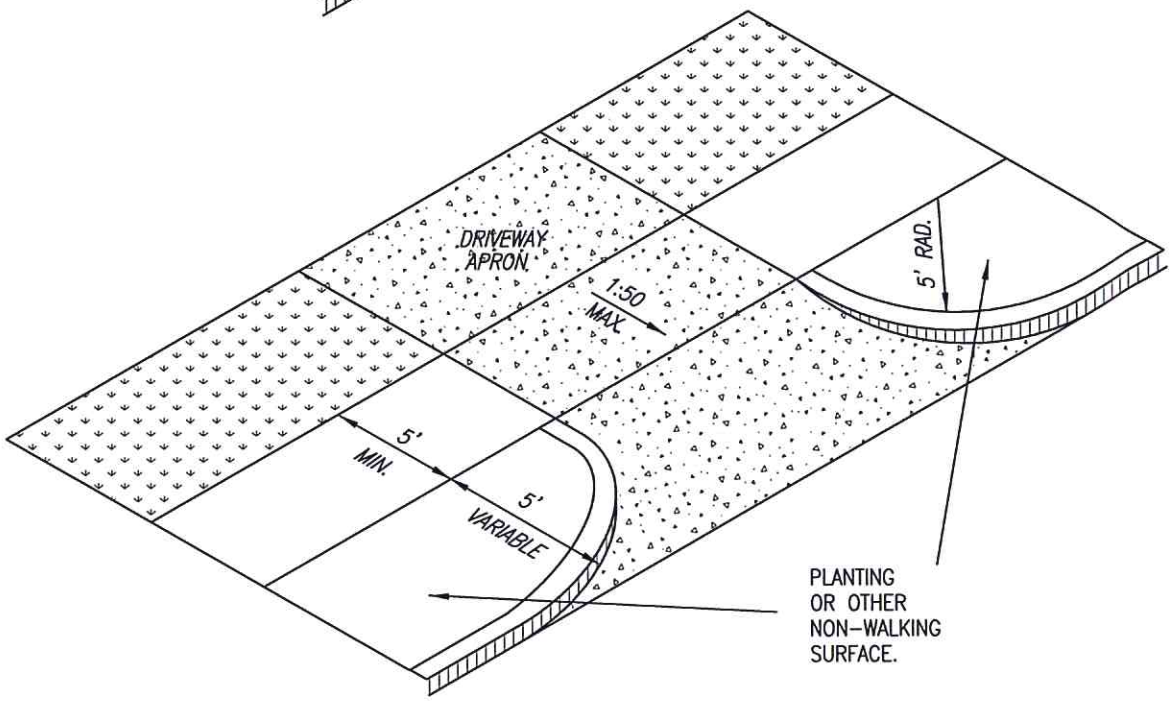
CONSTRUCTION STANDARDS AND DETAILS

T-36
SCALE: N.T.S.
ISSUE DATE: 03-12-13



APRON OFFSET SIDEWALK

TYPE 12



SETBACK SIDEWALK

TYPE 13

CITY OF KILLEEN

DEPARTMENT OF PUBLIC WORKS

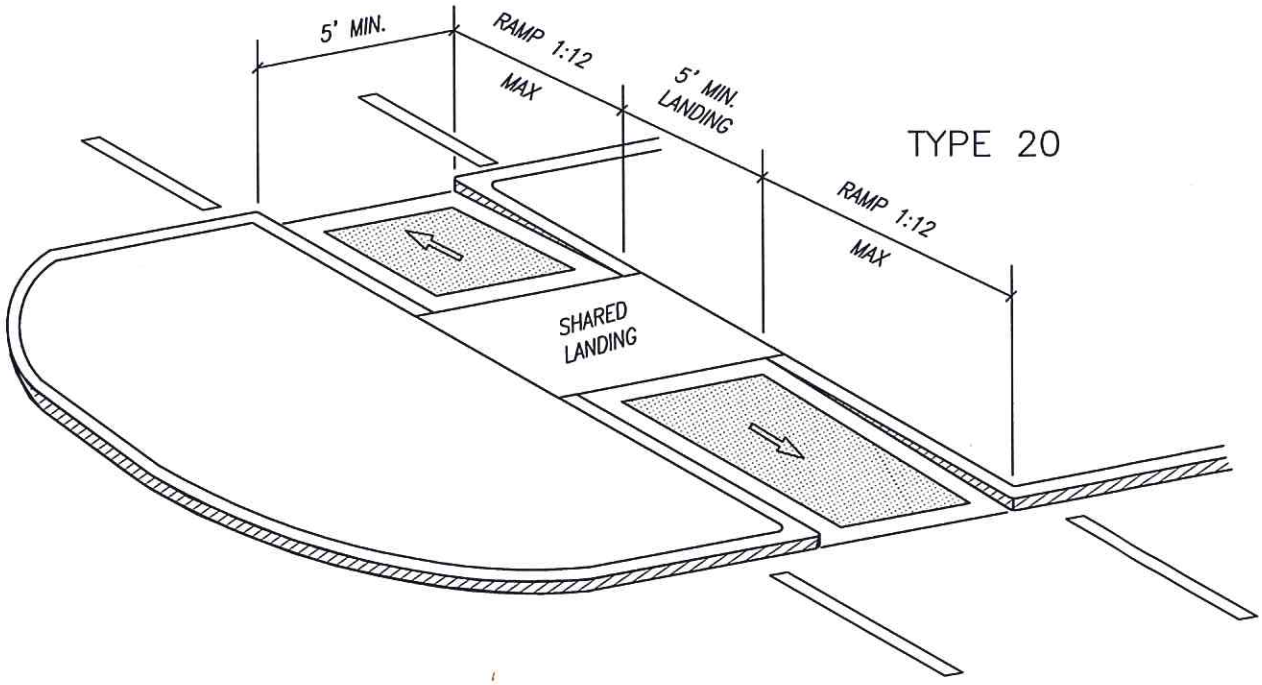
DRIVEWAY APRONS
TYPE 12–13

CONSTRUCTION STANDARDS AND DETAILS

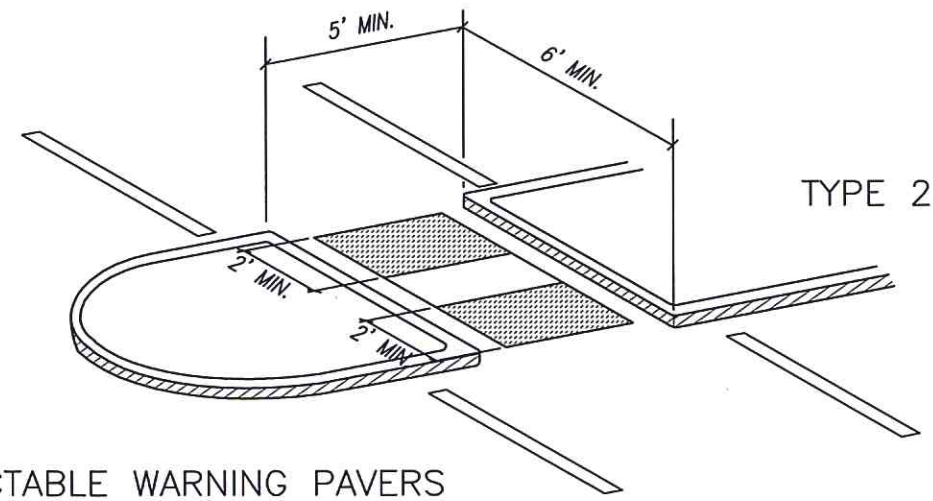
T-37

SCALE: N.T.S.

ISSUE DATE: 03-12-13



TYPE 20



TYPE 21

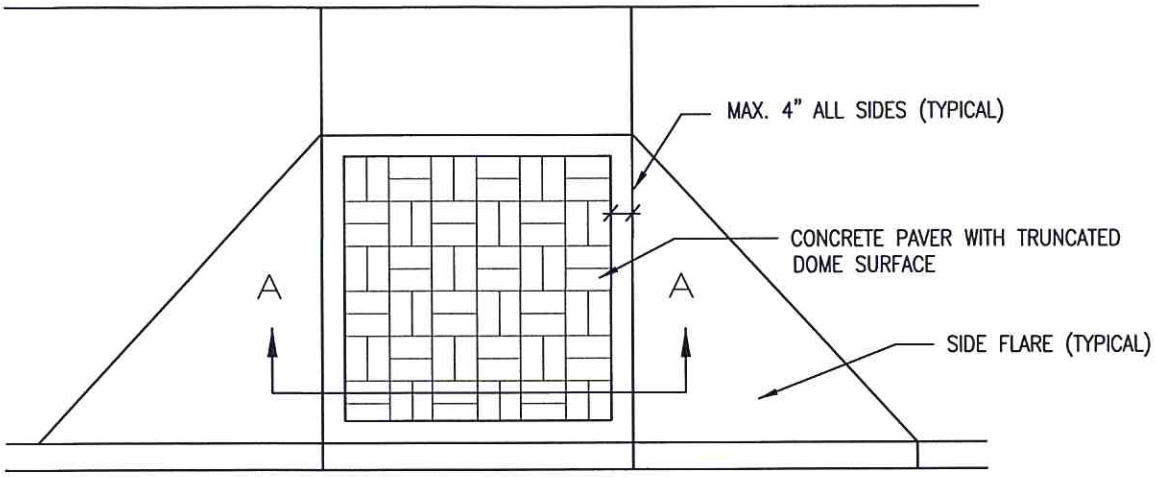
DETECTABLE WARNING PAVERS
SEE DETAIL T-37

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

CURB RAMP DETAILS AT MEDIAN ISLANDS TYPE 20-21

CONSTRUCTION STANDARDS AND DETAILS

T-38
SCALE: N.T.S.
ISSUE DATE: 03-12-13



TRUNCATED DOME PATTERN CURB RAMP

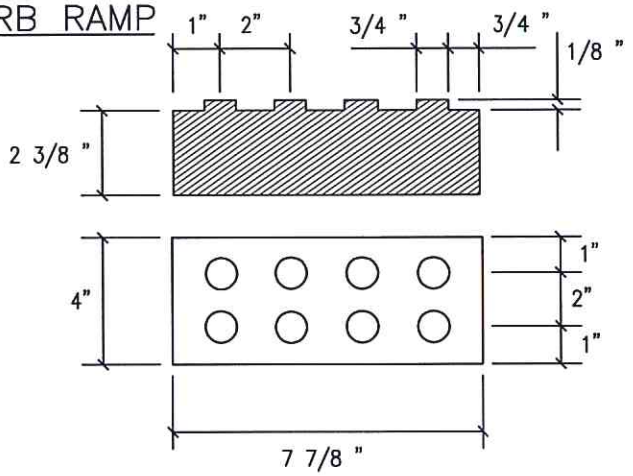
GENERAL NOTES

CONCRETE PAVER UNITS SHALL MEET ALL REQUIREMENTS OF ASTM C-936, C-33, AND SHALL BE LAID IN A TWO BY TWO UNIT BASKET WEAVE PATTERN, UNLESS SHOWN OTHERWISE IN THE PLANS.

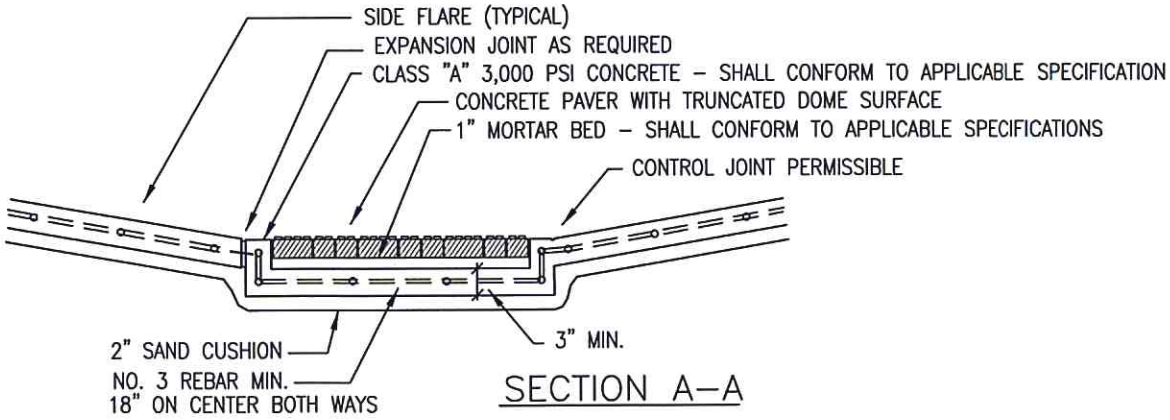
CONCRETE PAVER UNIT SHALL HAVE A TRUNCATED DOME TOP SURFACE FOR DETECTABLE WARNING TO PEDESTRIANS.

CONCRETE PAVER UNIT COLOR FOR THE RAMP SHALL BE A CONTRASTING COLOR TO THE ADJACENT SURFACES. THE COLOR OF THE CONCRETE PAVER UNITS SHALL BE SHOWN ELSEWHERE IN THE PLANS. (ADJACENT SURFACES INCLUDE SIDE FLARES).

CONCRETE PAVER UNITS SHALL BE SAW CUT ONLY AND ANY CUT UNIT SHALL BE NOT LESS THAN 25 PERCENT OF A FULL UNIT.



CONCRETE PAVER WITH TRUNCATED DOME SURFACE



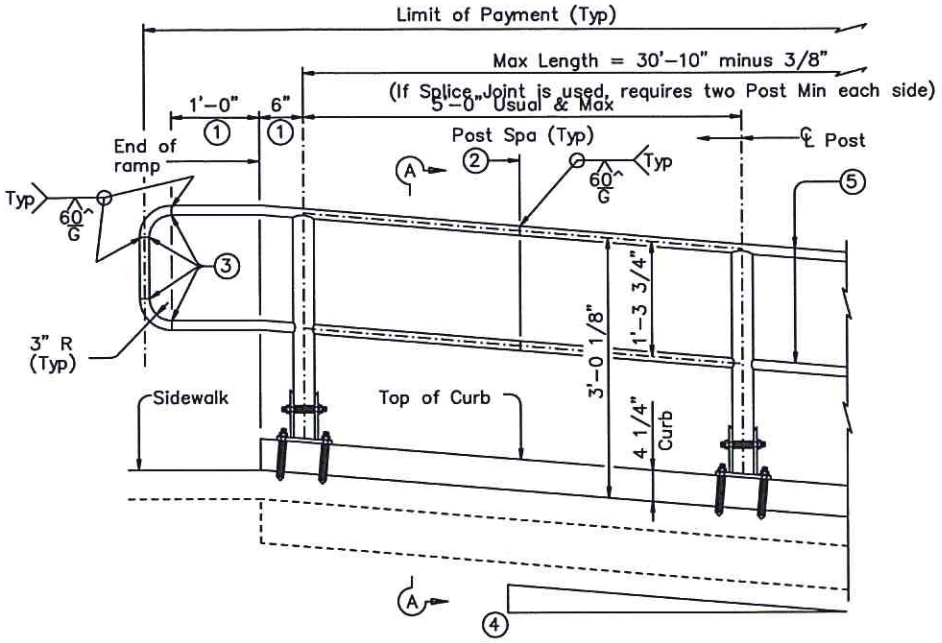
SECTION A-A

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

CURB RAMP DETECTABLE WARNING PAVERS

CONSTRUCTION STANDARDS AND DETAILS

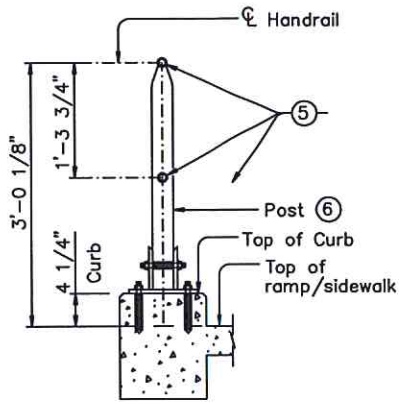
T-39
SCALE: N.T.S.
ISSUE DATE: 03-12-13



TxDOT TY A

ELEVATION

(Shop Splices and Splice Joints only shown on one Type for clarity)



SECTION A-A

(Showing Handrail Ty A)

(1) Parallel to ground.

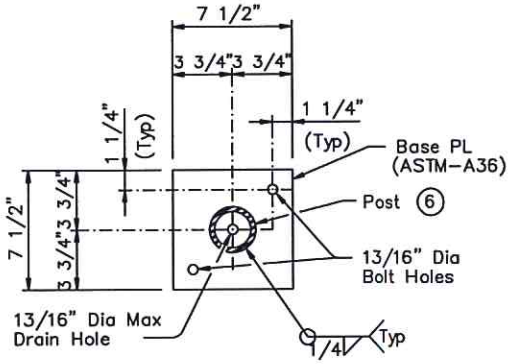
(2) One shop splice per panel is permitted with minimum 85 percent penetration. The weld may be square groove or single vee groove. Grind smooth.

(3) Shop splice is permitted with minimum 85 percent penetration. The weld may be square groove or single vee groove. Grind smooth.

(4) See Ramp Details located elsewhere in plans for ramp slope and dimensions. Maximum ramp slope will not exceed 8.3 percent. Level landing required for each 30" rise if grade exceeds 5 percent.

(5) 1" Dia Extra Heavy Pipe (1.315" O.D., 0.179" wall thickness). Parallel to ramp/sidewalk. Provide holes as needed in 1" Dia pipe for galvanizing drainage and venting.

(6) 2 " Dia Standard Pipe (2.875" O.D., 0.203" wall thickness). Plumb all posts. See "Post Mount Detail" for crimping and trimming post to fit Dia of top rail. Provide holes as needed in post for galvanizing drainage and venting.



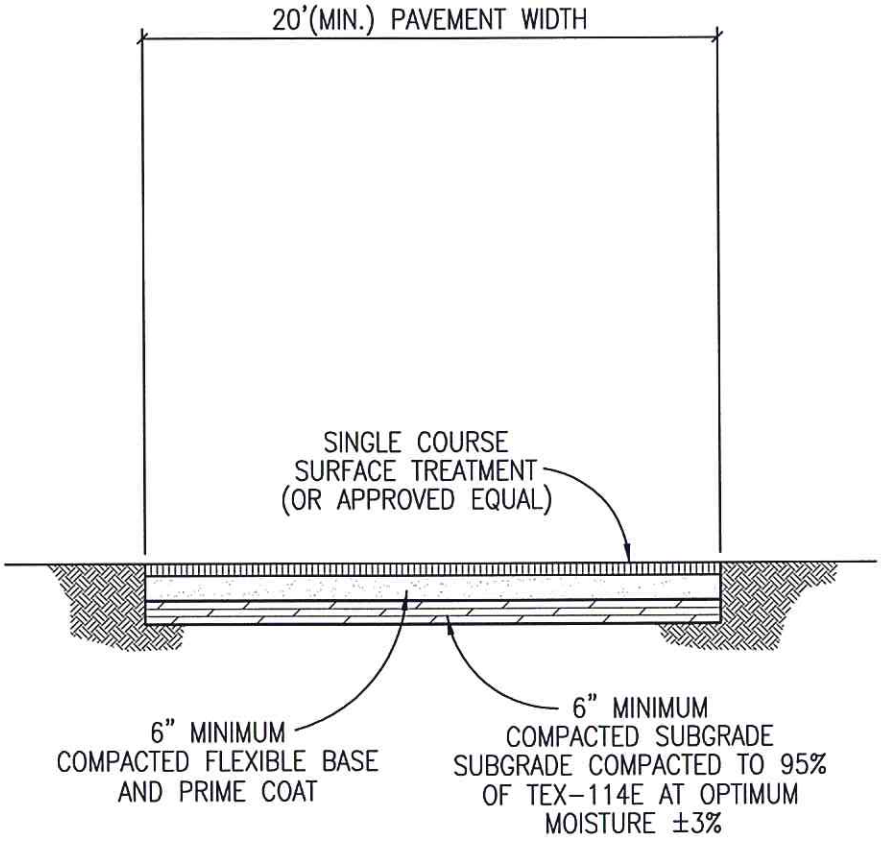
TYPICAL POST BASE PLATE DETAIL

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

REMOVABLE HAND RAIL

CONSTRUCTION STANDARDS AND DETAILS

T-40
SCALE: N.T.S.
ISSUE DATE: 03-12-13

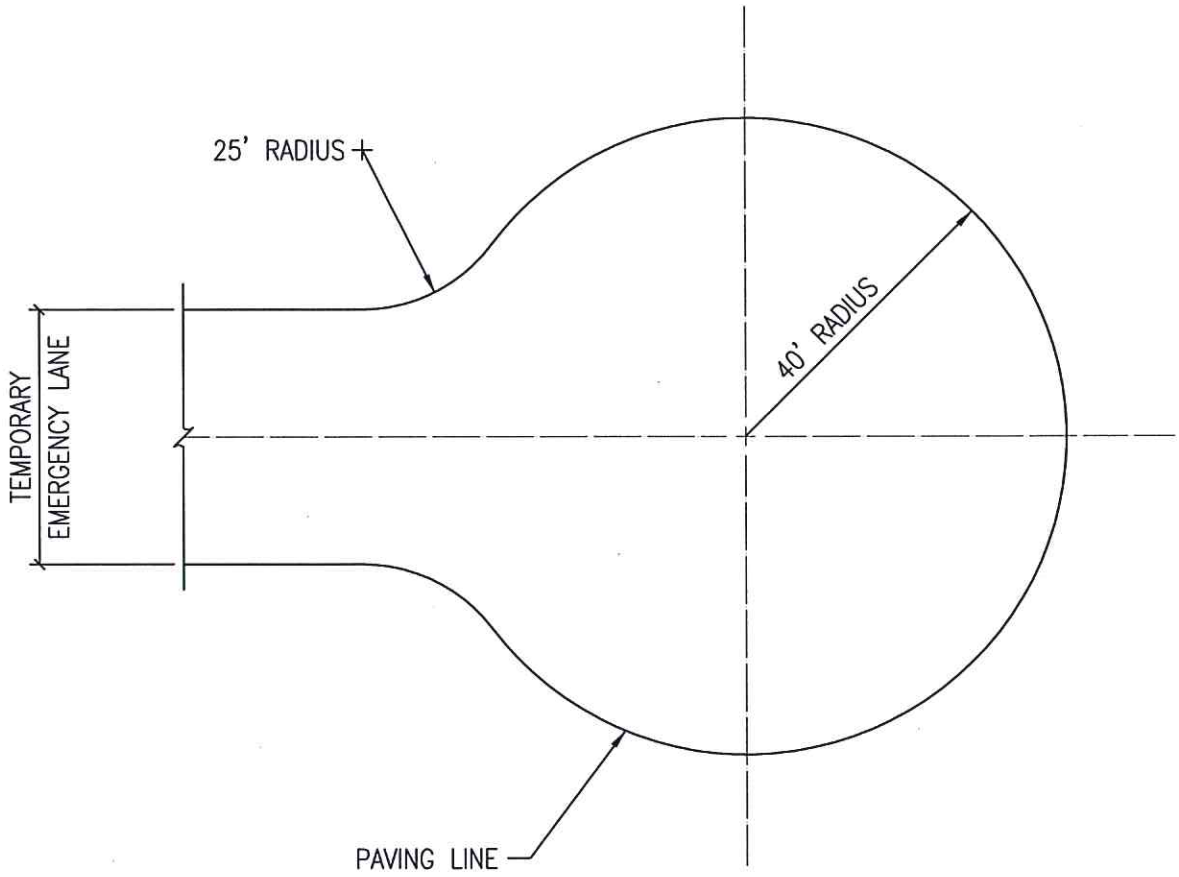


CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

TEMPORARY ALL WEATHER DRIVING SURFACE

CONSTRUCTION STANDARDS AND DETAILS

T-41
SCALE: N.T.S.
ISSUE DATE: 03-12-13



NOTES:

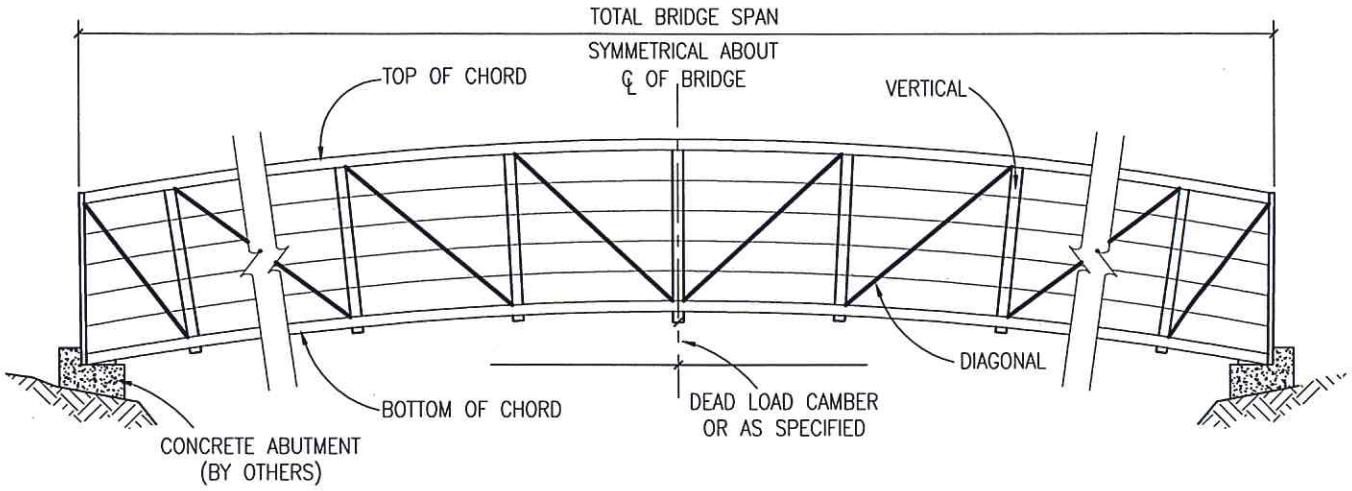
1. CONSTRUCTION OF TEMPORARY ALL WEATHER DRIVING SURFACE TURN AROUND SHALL BE IN ACCORDANCE WITH DETAIL T-41.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

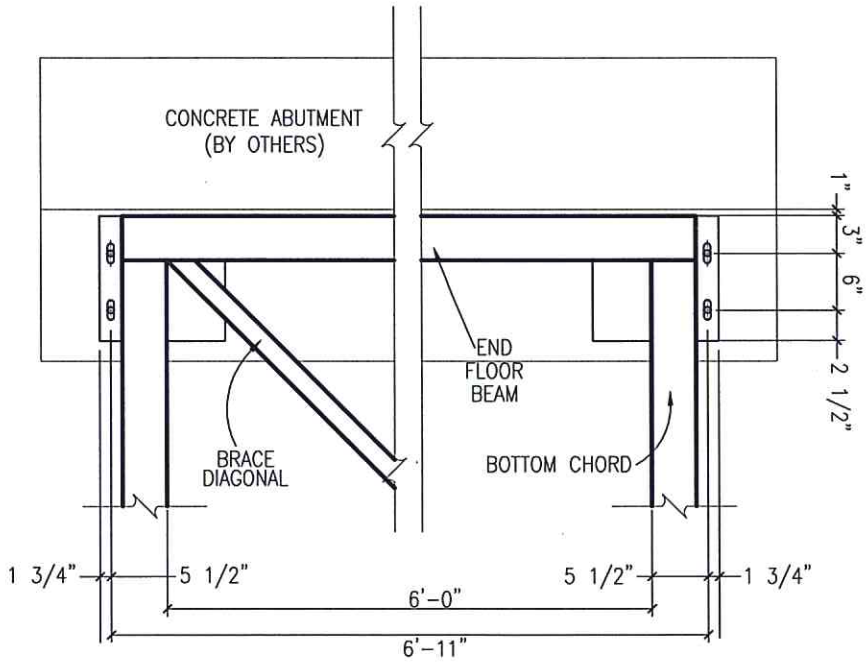
TEMPORARY ALL WEATHER DRIVING SURFACE TURN AROUND

CONSTRUCTION STANDARDS AND DETAILS

T-42
SCALE: N.T.S.
ISSUE DATE: 03-12-13



ELEVATION



BEARING ASSEMBLY – PLAN VIEW

NOTES:

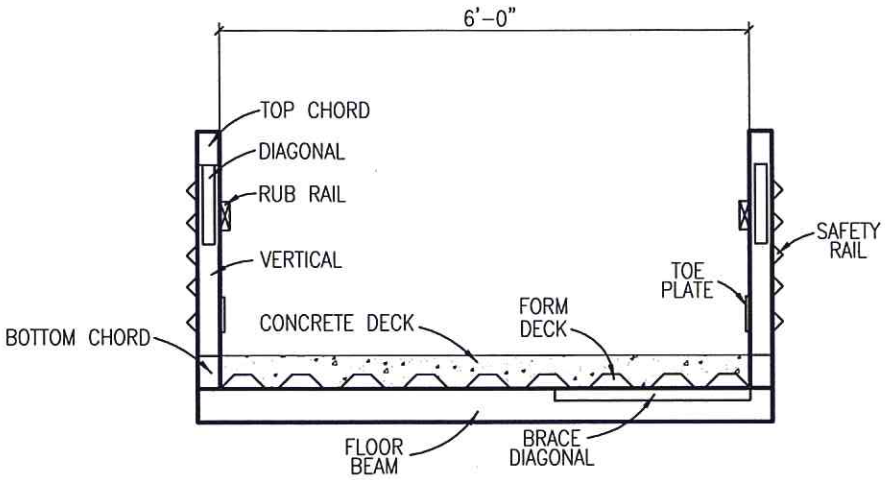
1. PEDESTRIAN BRIDGE SHALL BE MANUFACTURED BY CONTINENTAL BRIDGE OR APPROVED EQUAL.
2. DIMENSIONS SHOWN ARE BASED ON 15' BRIDGE SPAN. DIMENSIONS FOR OTHER BRIDGE SPANS SHALL BE VERIFIED BY PROJECT ENGINEER.
3. COLOR OF PEDESTRIAN BRIDGE TO BE DETERMINED BY CITY OF KILLEEN PARKS DIRECTOR.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

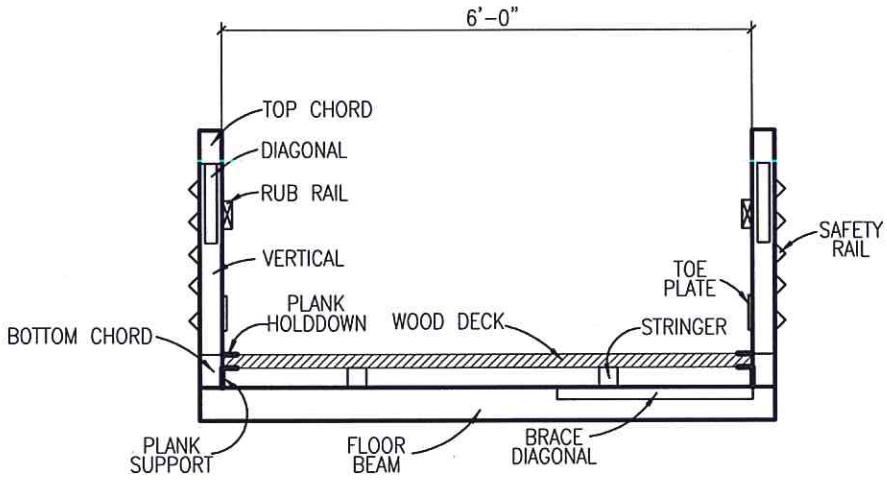
PEDESTRIAN BRIDGE
ELEVATION AND BEARING ASSEMBLY

CONSTRUCTION STANDARDS AND DETAILS

T-43
SCALE: N.T.S.
ISSUE DATE: 03-12-13



BRIDGE SECTION



BRIDGE SECTION

NOTES:

1. PEDESTRIAN BRIDGE SHALL BE MANUFACTURED BY CONTINENTAL BRIDGE OR APPROVED EQUAL.
2. DIMENSIONS SHOWN ARE BASED ON 15' BRIDGE SPAN. DIMENSIONS FOR OTHER BRIDGE SPANS SHALL BE VERIFIED BY PROJECT ENGINEER.
3. COLOR OF PEDESTRIAN BRIDGE TO BE DETERMINED BY CITY OF KILLEEN PARKS DIRECTOR.

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

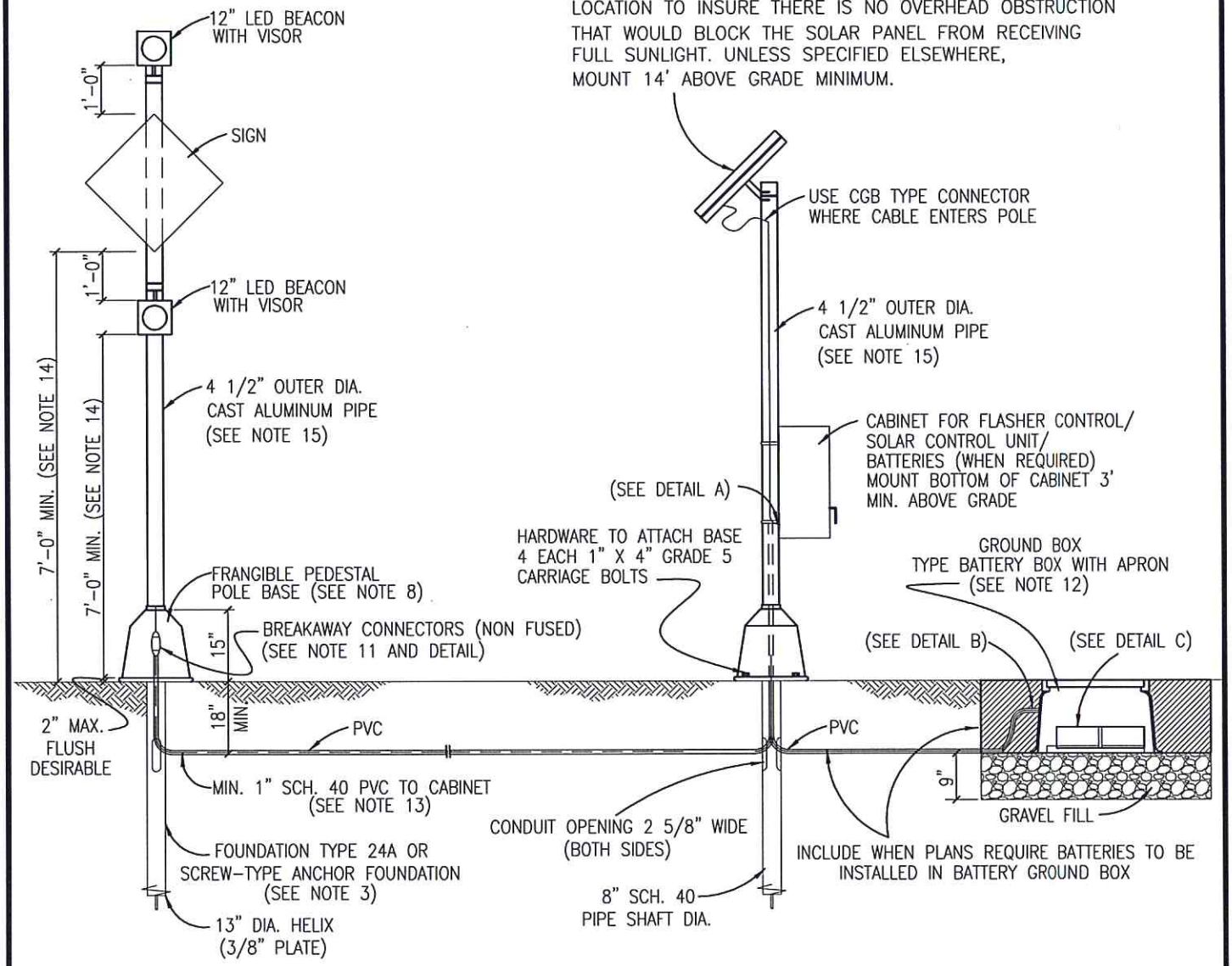
PEDESTRIAN BRIDGE SECTIONS

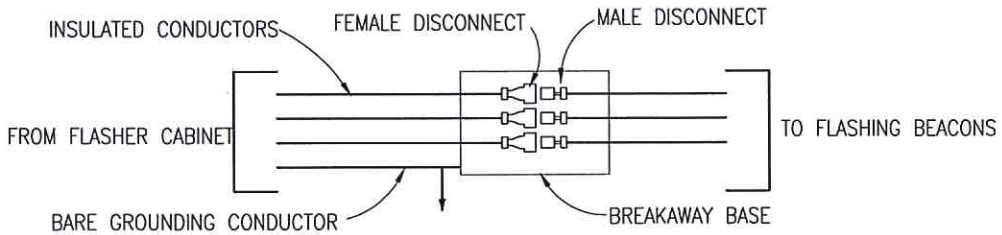
CONSTRUCTION STANDARDS AND DETAILS

T-44
SCALE: N.T.S.
ISSUE DATE: 03-12-13

* – SEE SHEET T-44 FOR NOTES.

ORIENT PANEL FOR OPTIMUM EXPOSURE TO SUNLIGHT (FACE TO SOUTH). PRIOR TO INSTALLATION, CHECK THE LOCATION TO INSURE THERE IS NO OVERHEAD OBSTRUCTION THAT WOULD BLOCK THE SOLAR PANEL FROM RECEIVING FULL SUNLIGHT. UNLESS SPECIFIED ELSEWHERE, MOUNT 14' ABOVE GRADE MINIMUM.





BREAKAWAY ELECTRICAL CONNECTORS

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

SOLAR POWERED ROADSIDE FLASHING BEACON ASSEMBLY DETAILS (ALUMINUM)

CONSTRUCTION STANDARDS AND DETAILS

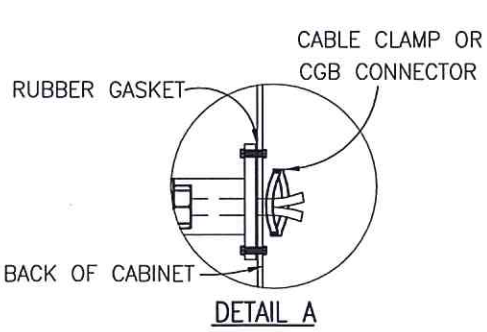
T-45
SCALE: N.T.S.
ISSUE DATE: 03-12-13

NOTES:

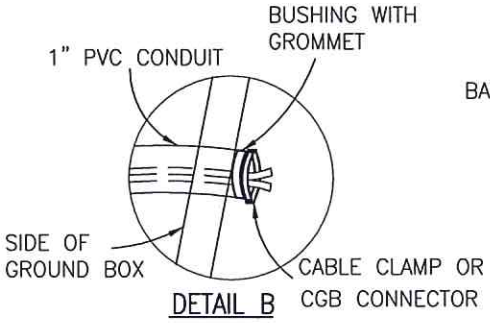
1. DETAILS SHOW A TYPICAL WARNING SIGN WITH TWO FLASHING BEACON HEADS, OTHER ARRANGEMENTS ARE POSSIBLE WHEN ONLY ONE BEACON IS REQUIRED, INSTALL THE UPPER BEACON.
2. SEE TxDOT ITEM 685, "ROADSIDE FLASHING BEACON ASSEMBLIES" FOR FURTHER REQUIREMENTS.
3. USE EITHER A SCREW-IN TYPE ANCHOR FOUNDATION OR 24" DRILL SHAFT FOUNDATION. INSTALL THE SCREW IN TYPE ANCHOR FOUNDATION AS SHOWN. ON SLOPE, INSTALL ONE EDGE AT GROUND LEVEL.
4. WHEN USED, PROVIDE ONE OF THE FOLLOWING SCREW IN TYPE ANCHOR FOUNDATION: A.B. CHANCE, MODEL C11242NG4VP, COMPONENT PRODUCTS INC. MODEL CPI-SLSF-5TX, PELCO PRODUCTS INC. MODELS PB-5359, PB-5360 OR PB 5375 O OR APPROVED EQUAL.
5. PROVIDE CLEARANCE AS SHOWN ABOVE THE SIDEWALK OR PAVEMENT GRADE AT THE EDGE OF THE ROAD. WHEN A BOTTOM BEACON IS NOT USED, MOUNT THE SIGN AT LEAST 7' ABOVE THE SIDEWALK OR PAVEMENT GRADE AT THE EDGE OF THE ROAD.
6. USE MATERIALS SPECIFICALLY DESIGNED FOR ATTACHING CABINETS, BEACON HEADS, SOLAR PANELS, ECT. TO POLES.
7. CONDUIT IN FOUNDATION AND WITHIN 6" OF FOUNDATION IS SUBSIDIARY TO THE ITEM 685, "ROADSIDE FLASHING BEACON ASSEMBLIES."
8. PER MANUFACTURER'S RECOMMENDATIONS, ENGAGE ALL THREADS ON THE PEDESTAL POLE BASE AND PIPE UNLESS THE PIPE IS FULLY SEATED INTO BASE. IN HIGH WINDS, USE A POLE AND BASE COLLAR ASSEMBLY TO ADD STRENGTH AND PREVENT LOOSENING ON CONNECTION.
9. INSTALL BEACON HEADS AS SHOWN HERE, AS SHOWN ELSEWHERE ON THE PLANS, OR AS DIRECTED. USE HARDWARE SPECIFICALLY DESIGNED FOR MOUNTING BEACON HEADS ON POLES.
10. LOCATE THE TYPE LB CONDUIT BODY ATTACHMENT IN THE BOTTOM THIRD OF THE BACK OF THE CABINET.
11. PROVIDE NON FUSED WATERTIGHT BREAKAWAY ELECTRICAL CONNECTORS FOR BREAKAWAY POLES. (BUSSMANN HET, LITTLEFUSE LET, FERRAZ-SHAMUT FEBN OR APPROVED EQUAL)
12. INSTALL THE BATTERIES ON A 3/16" THICK PLASTIC SHEET AND CONNECT TOGETHER. PLACE A PLASTIC COVER (BATTERY BELL JAR) OVER THE TOP OF EACH BATTERY AND SECURE THE BATTERY BELL JAR TO THE BATTERY WITH A STRAP THE BATTERIES, BELL JARS, STRAPS AND 3/16" PLASTIC SHEET ARE SUBSIDIARY TO THE ITEM 685, "ROADSIDE FLASHING BEACON ASSEMBLIES." WHEN REQUIRED, INSTALL BATTERIES IN THE FLASHER CABINET. WIRE BATTERIES ACCORDING TO MANUFACTURES RECOMMENDATIONS.
13. UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER, USE THE FOLLOWING TABLE TO DETERMINE THE WIRE SIZE FROM CABINET TO BEACONS.

DISTANCE FROM CABINET TO BEACONS (FT)	MINIMUM REQUIRED WIRE SIZE (AWG)
0 – 35	#14
35 – 60	#12
60 – 100	#10
> 100	#8

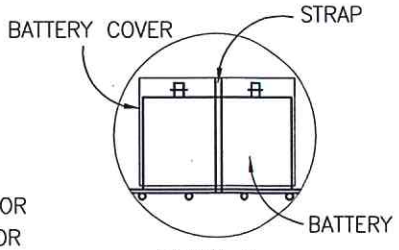
14. PROVIDE CLEARANCE AS SHOWN ABOVE THE SIDEWALK OR PAVEMENT GRADE AT THE EDGE OF THE ROAD. WHEN A BOTTOM BEACON IS NOT USED, MOUNT THE SIGN AT LEAST 7' ABOVE THE SIDEWALK OR PAVEMENT GRADE AT THE EDGE OF THE ROAD.
15. UNLESS OTHERWISE SHOWN ON THE PLANS, POLE SHAFT SHALL BE ONE PIECE, SCH. 40 ALUMINUM PIPE, ASTMB429 OR B221 (ALLOY 6061-T6 ONLY). ALUMINUM CONDUIT WILL NOT DEVELOP THE NECESSARY STRENGTH AND WILL NOT BE ALLOWED.



DETAIL A



DETAIL B



DETAIL C

CITY OF KILLEEN
DEPARTMENT OF PUBLIC WORKS

SOLAR POWERED ROADSIDE FLASHING BEACON ASSEMBLY

CONSTRUCTION STANDARDS AND DETAILS

T-46
SCALE: N.T.S.
ISSUE DATE: 03-12-13